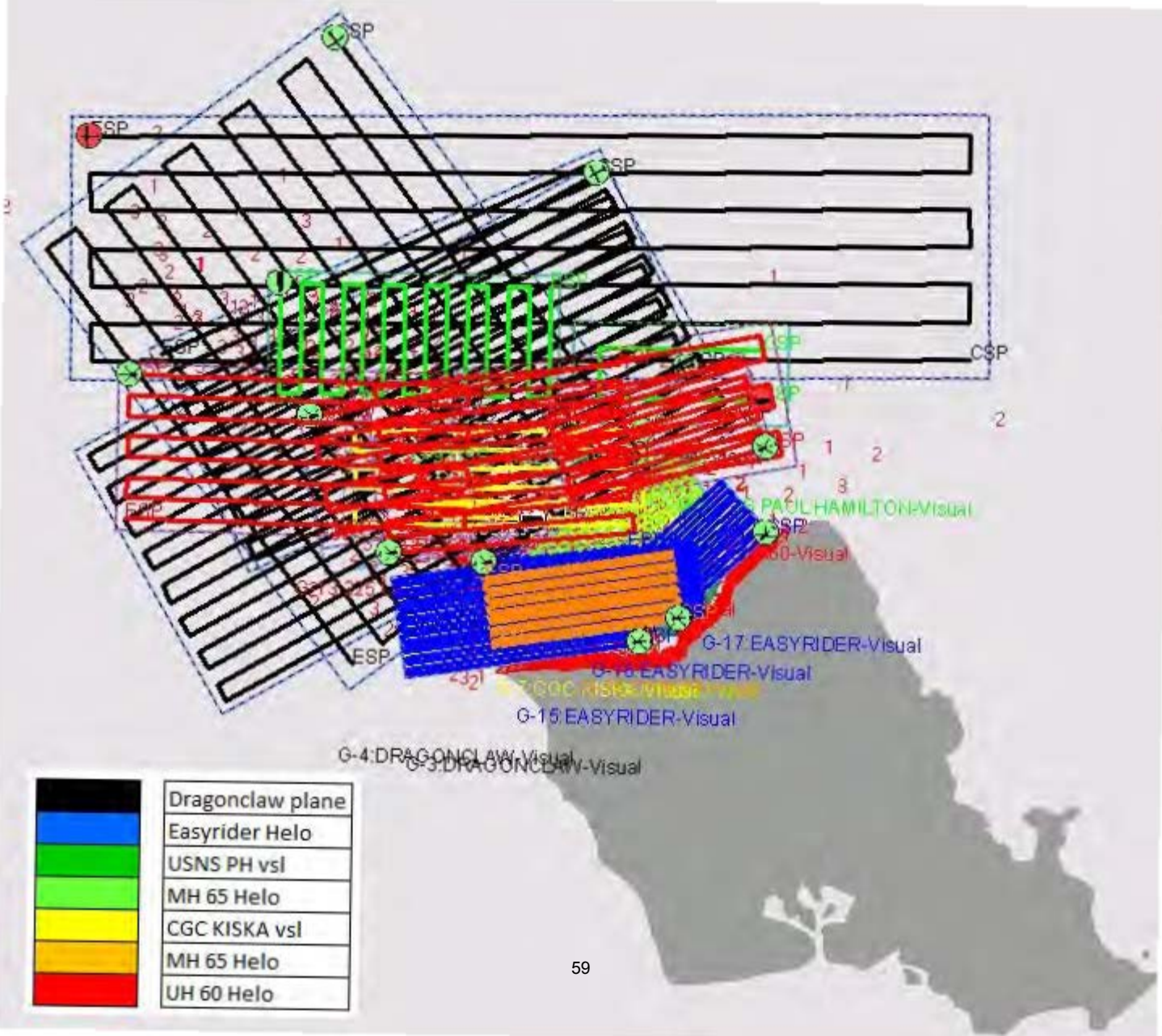
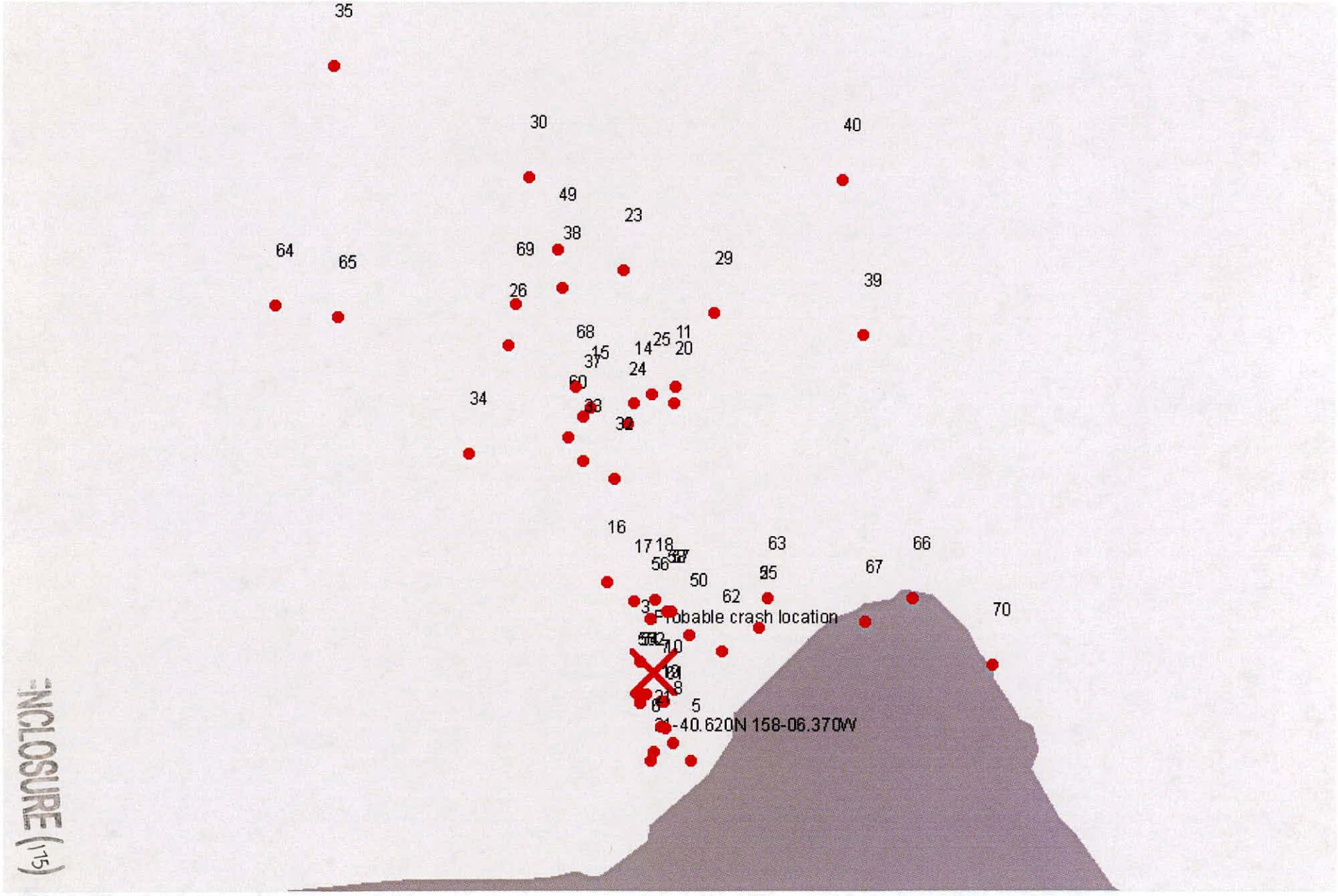
Pages 1 through 58 redacted for the following reasons:
- -
NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT http://www.noaa.gov/foia-freedom-of-information-act https://www.uscg.mil/foia/


CSP
ESP
PAUL HAMILTON-Visual
G-17 EASYRIDER-Visual
G-15 EASYRIDER-Visual
G-4 DRAGONCLAW-Visual
G-3 DRAGONCLAW-Visual
Dragonclaw plane
Easyrider Helo
USNS PH vsl
MH 65 Helo
CGC KISKA vsl
MH 65 Helo
UH 60 Helo

Debris Reports as of 2200Z 18 JAN2016



ENCLOSURE (175)

: DEBRIS LOG

DEBRIS #	TIME	LOCATION	Item	Recovery/Reporting Source	Entered in SAROPS
1	151012Z	21-38.200N 158-05.300W	debris	MISLE	Yes
2	152048Z	21-41.800N 158-03.340W	uninflated raft located by Easy Rider	Easy Rider	Yes
3	150840w	21-40.881N 158-06.779W	raft	MISLE	Yes
3	152053Z	21-40.881N 158-06.779W	Raft 20 man located by CGC AHI	AHI	Yes
5	151751Z	21-38.2N 158-05.3W	65 reported large debris field	HH-65	Yes
6	0030w	21-38.190N 158-06.480W	4 helmets	MISLE	Yes
7	151757Z	21-39.82N 158-06.18W	debris reported by CGC KISKA	KISKA	Yes
8	151758Z	21-38.687N 158-05.851W	helo blade found	MISLE	Yes
8	151808Z	21-38.687N 158-05.8511W	debris reported by P/C KONG	PC KONG	Yes
10	151808zZ	21-39.81N 158-06.1W	green dye marker reported by CGC KISKA	KISKA	Yes
3	151838Z	21-40.881N 158-06.779W	life raft with cover over it	MISLE	Yes
12	unk	21-48.310N 158-05.740W	landing gear	MISLE	Yes
13	160143Z	off waimea Bay heading north	oil sheen, debris field, 9 helmets, 1 boat, 2 life rafts	MISLE	
14	160600Z	21-47.870N 158-06.950W	debris	MISLE	Yes
15	160600Z	21-47.747N 158-08.199W	debris	MISLE	Yes
16	160600Z	21-43.045N 158-07.715W	debris	MISLE	Yes
17	160600Z	21-42.540N 158-06.940W	debris	MISLE	Yes
18	160600Z	21-42.553N 158-06.331W	debris	MISLE	Yes
19	160600Z	21-39.133N 158-06.192W	debris	MISLE	Yes
20	160600Z	21-47.889N 158-05.800W	debris	MISLE	Yes
21	160600Z	21-38.443N 158-06.386W	debris	MISLE	Yes
22	170545Z	USS JOHN PAUL JONES reports debris recovered at various locations in an area approx. 3.5 nm long by .75nm wide about 7nm NE of Kahuku. The debris contents consist of various fiberglass/aluminum structures, emergency radio, jump seat, seat harness, liferaft casing, interior frame piece, and a piece of rotor. Positions have been entered into SAROPS.		USS JOHN PAUL JONES	
23	171900Z	21-51.470N 158-07.250W	debris sheet metal	MISLE	Yes
24	171747Z	21-47.300N 158-07.100W	debris	MISLE	Yes
25	171759Z	21-48.110N 158-06.430W	debris	MISLE	Yes
26	171800Z	21-49.430N 158-10.560W	5'x5' sheet metal brown and yellow in color debris	MISLE	Yes
27	171859Z	21-42.360N 158-25.800W	white tarp debris	MISLE	Yes
28	172016Z	21-43.210N 158-38.050W	debris	MISLE	Yes
29	172007Z	21-50.320N 158-04.630W	debris landing gear	MISLE	Yes
30	172156Z	21-54.00N 158-10.00W	debris a/c cockpit door	MISLE	Yes
31	172206Z	LAIE Bay	Witness reports large grey cylinder floating	)(6) (b) (3) 10 USC § 130	
32	172220Z	21-45.842N 158-07.484W	DEEP SEA reported a 6' section of carbon fiber	Deep Sea	Yes
33	172256Z	21-46.32N 158-08.39W	R41 reported white square panel	R41	Yes
34	172259Z	21-46.50N 158-11.72W	R41 also reported 4 pieces of yellow panels	R41	Yes
35	172305Z	21-56.98N 158-15.68W	plastic L shaped	PHM	Yes
36	172308Z	22-00.00N 158-08.00W	blue pallet	PHM	Yes
37	172323Z	21-47.53N 158-08.38W	Possible Aircraft tires	KOA 17	Yes
38	172337Z	21-51.00N 158-09.00W	large debris field	KOA 17	Yes
39	180152Z	21-49.7N 158-00.3W	debris	CG R1707	Yes
40	180152Z	21-53.9N 158-0.9W	debris	CG R1707	Yes
41	Undocumented	21-30.000N 158-13.800W	black plastic	MISLE	No
42	Undocumented	21-33.100N 158-15.400W	large debris field	MISLE	No - 3) 10 U confirmed no debris found at Kai'ena Point
43	Undocumented	21-39.200N 158-03.700W	life vest	MISLE	No - 3) 10 U confirmed no debris found at Kai'ena Point
44	Undocumented	21-34.900N 158-10.500W	green cables	MISLE	Yes
45	Undocumented	21-35.010N 158-08.250W	oil report	MISLE	Yes
46	Undocumented	21-46.200N 158-07.430W	a/c door	MISLE	Yes
47	Undocumented	21-39.750N 158-06.770W	fuel tank	MISLE	Yes
48	Undocumented	21-43.060N 158-08.120W	black foam box	MISLE	Yes
49	170313Z	21-52.040N 158-09.108W	Middle portion of Rotor Bag or cushion	HAMILTON	Yes
50	170352Z	21-41.610N 158-05.362W	Report of Deflated raft 1NM from Waimea Bay Buoy	3) 10 U to HAMILTON	Yes
51	170411Z	32-57.430N 157-57.19W	Black crate	HAMILTON	Yes
52	180633Z	21-39.997N 158-06.600W	Spotted Life Raft and Green dye	Kiska	Yes
53	180835Z	21-40.000N 158-06.839W	Spotted Helo wheels	KISKA	Yes
54	180750Z	21-40.000N 158-06.760W	Spotted Second Liferaft	Kiska	Yes
55	180855Z	21-41.800N 158-03.340W	Report of life raft	Kiska	Yes
56	181245Z	21-42.047N 158-06.490W	Rotor BladePart	Kiska	Yes
57	181338Z	21-42.245N 158-05.871W	Rotor BladePart	Kiska	Yes
58	181348Z	21-42.245N 158-06.007W	Flight Bag	Kiska	Yes
59	180542Z	IVO 61-349 Kamehameha HYWY	Small Plastic Headset	)(6) (b) (3) 10 USC § 13(	na
60	180755Z	21-46.94N 158-08.83W	Debris	HAMMERHEAD 559	Yes
61	180804Z	21-39.07N 158-06.04W	Debris	C-130	Yes
62	180804Z	21-41.15N 158-04.4W	Debris	C-130	Yes
63	180804Z	21 42.6N 158-03.1W	Debris	C-130	Yes
64	181053Z	21-50.50N 158-17.32W	Small Debris	HAMILTON	Yes
65	181136Z	21-50.18N 158-15.53W	Small Debris	HAMILTON	Yes
66	180300Z	21 42.614N 157 58.917W	Molding with grate	Haleiwa ICP	Yes
67	180300Z	21 41.971N 158 0.256W	Green interior panel piece	3) 10 US Haleiwa ICP	Yes
68	181855Z	21-48.3N 158-08.633W	3X3' CURLED METAL PIECE WITH FOAM LINING WITH ORANGE PLASTIC FLOAT	FV Flier	Yes
69	182008Z	21-50.54N 158-10.353W	4 X 4' PIECE OF DEBRIS	FV Great White Marlin	Yes
70	181738Z	21 40.811 N, 157 56.610 W	Black equipment bag smelling of Gas	Marine Shore Patrol	Yes

DEBRIS COLLECTION ROSTER (UNIFIED EFFORT)

ITEM #	DESCRIPTION	DATE & TIME FOUND	LOCATION	POC	PHONE	ADDITIONAL NOTES
2	MULTIPLE BLACK PIECES OF INNER LINNING LAYER	15 JAN 2016 / 1300	MAKUA BEACH (SECTOR A)	(b)(6) (b) (3) 10 USC § 130b		ITEMS WERE ON THE SHORE AT MAKUA BEACH CALLED IN BY LOCALS. TRANSFERRED TO HQ AT JAN 15 2016 / 2047.
3	FUEL BLADDER	16 JAN 2016 / 0953	KAENA POINT (SECTOR A)			SHORE PATROL LOCATED ITEM AND RELOCATED ITEM TO HQ.
4	ALICE PACK FRAME	16 JAN 2016 / 1442	KIIKII STREAM VACINITY 21°34.942N 158°07.289W (SECTOR C)			) (b) (3) 10 USC IS ATTACHED TO 2/3 FOX COMPANY.
5	SUN GLASSES	16 JAN 2016 / 1545	POLICE BEACH (THE POINT) (SECTOR D)			) (3) 10 US LOCATED THE PAIR OF "MUIRSKATE" SUNGLASSES 500 FT NORTH OF POLICE BEACH.
20	AIRCRAFT PIECE 30 1/2 IN x 7 1/2 IN	17 JAN 2016 / 1220	KAWELA BEACH (SECTOR F)			TEAM F BEACH PATROL MARINES LOCATE ITEMS 20-22 ALONG THE SHORE AND RELOCATED THE ITEMS TO HQ.
21	CELL PHONE "SAMSUNG GALAXY NOTE "		KAHUKU BEACH (SECTOR F)			
22	PLASTIC COVER PIECE 42 1/2 IN x 27 1/2 IN					
23	CHARRED PLASTIC " RECTANGULAR" PIECE 6 IN x 3 IN	17 JAN 2016 / 0825	KAWAILOA BEACH (SECTOR D)			TEAM D BEACH PATROL MARINES LOCATE ITEM ALONG THE SHORE AND RELOCATED THE ITEM TO HQ.
24	SUNGLASSES	17 JAN 2016 / 0723	MAKAHOA POINT (SECTOR G)			(b) (3) 10 USC IS ATTACHED TO 2/3 GOLF COMPANY.
26	WHITE ISULTATION 46 1/2 IN x 38 1/2 IN	16 JAN 2016 / 1300	MOKULEIA BEACH PARK (SECTOR C)			TEAM C BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
27	BURNED NYLON PIECE	15 JAN 2016 / 1740	KAENA POINT (SECTOR A)	BEACH PATROL MARINES	UNK	TEAM A BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
28	UNKNOWN COMPOSITE MATERIAL	17 JAN 2016 / 1711	MOKULEIA BEACH PARK (SECTOR C)	(b)(6) (b) (3) 10 USC § 130b		TEAM C BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
29	ROUND PLASTIC PIPE COVER BLACK PLASTIC ELBOW WHITE PLASTIC CAP	17 JAN 2016 / 1640				
30	FIBER CLOTH 15 IN x 14 1/2 IN	17 JAN 2016 / 1619	CROZIER BEACH (SECTOR C)			
31	WEAVED BLACK PLASTIC PIECE 45 IN x 36 IN	17 JAN 2016 / 1800	EAST END OF MOKULEIA BEACH (SECTOR C)			
32	CO2 CYLINDER	17 JAN 2016 / 1626	SOUTH END OF SUNSET BEACH (SECTOR E)			TEAM E BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.

33	MASK COMPONENTS	17 JAN 2016 / 1600	KAWAILOA BEACH (SECTOR D)		TEAM D BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
34	ALUMINUM PIPE (BENT) 27 IN BLACK PADDING (GRADED) PLASTIC EXHAUST COVER 16 IN x 6 IN PLASTIC HANDLE 5 IN POSSIBLE ELECTRICAL WIRING COVER "L" SHAPED PLASTIC PIECE "C" SHAPED PLASTIC PIECE	17 JAN 2016 / 1625	KAWELA BAY (SECTION F)		TEAM F BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
35	CHEM LIGHTS (4) UNKNOWN PLASTIC CAP 2 1/2 IN PLASTIC CYLINDER 2 1/2 IN GREY POLYESTER BAG	17 JAN 2016 / 1700	NATIONAL WILDLIFE REFUGE (SECTOR G)		TEAM G BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
36	POSSIBLE AIRCRAFT PIECE 19 1/2 IN x 7 1/2 IN POSSIBLE GREY SEAL 77 1/2 IN x 1 1/2 IN	17 JAN 2016 / 1715	KAHUKU POINT (SECTOR G)		TEAM G BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
37	BLUE/BLACK CHARRED PLASTIC	18 JAN 2016 / 0910	HALEIWA BEACH /HQ	(b)(6) (b) (3) 10 USC § 130b	b) (3) 10 US FOUND ITEM ON BEACH BEHIND COC AND RELOCATED ITEM TO HQ.
38	MELTED PLASTIC (WHITE)	18 JAN 2016 / 0950	45-488 KAM HWY KANEOHE HI 96744		CIVILIAN FOUND ITEM AND REPORTED FINDING TO HQ.
39	EAR PHONE PART	18 JAN 2016 / 0951	61-349 KAM HWY HALEIWA, HI (SECTOR D)		STICKER READS"DAVID CLARK CO.,INC 19OHM EARPHONE P/N 10376G-51"; FOUND ON BEACH AT HIGH WATER MARK
40	BLACK PLASTIC PARTS/ENGINE COOLANT CAP	18 JAN 2016 / 0830	MOKULEIA ARMY BEACH (SECTOR B) (4QEJ 82495 86713)		TEAM B BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ
41	WHITE FIBER GLASS PANEL	18 JAN 2016 / 0920	SECTOR G		TEAM G BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
42	BLUE CANVAS BAG (41"X14")	18 JAN 2016 / 0925	NATIONAL WILDLIFE REFUGE (SECTOR G) (0899)		TEAM G BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
43	CEREMIC MATERIAL PIECES	18 JAN 2016 / 0920	SECTOR G		TEAM G BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
44	BLACK OAKLEY SUNGLASSES	18 JAN 2016 / 0730	KAWELA (SECTOR F) (FJ 02473 00007)		TEAM F BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
45	GROUNDING STUD WITH CABLE	18 JAN 2016 / 0915	WAIALEE (SECTOR F) (FJ 00996 98807)		TEAM F BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
46	MISC PLASTIC PIECES (BLACK/RED)	18 JAN 2016 / 0900	WAIALEE (SECTOR F) (FJ 00562 98591)		TEAM F BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
47	BURNT PLASTIC PIECE (RED)	18 JAN 2016 / 0930	KAWELA BAY (SECTOR F) (FJ 02895 99960)		TEAM F BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
48	CORRODED METAL PIECE	18 JAN 2016 / 1040	68-639 CROZIER DR WAIALUA HI 96791 (SECTOR B)		b) (3) 10 US WAS DISPATCHED OUT TO CAMP HONELANI MOKULEIN TO INVESTIGATE A CALL IN
49	NVG LENS COVERS/MISC BLACK PLASTIC PIECES	18 JAN 2016 / 0930	MEADOW GOLD (SECTOR D) (4QEJ94216 90527)		TEAM D BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.

50	BLACK BLANKET WITH TURQUIOSE ROPE (90"X55")	18 JAN 2016 / 1450	MOKUIEIA BEACH (NORTH SIDE) (SECTOR C)	OCEAN SAFETY	808-429-4701	OCEAN SAFETY NOTICED ITEM FLOATING IN WATER AND RELOCATED THE ITEM TO HQ.
51	CELL PHONE (AT&T)	15 JAN 2016 / 1030	PUPUKEA BEACH (SECTOR E)			CIVILIAN FOUND CELL PHONE 12 HOURS AFTER REPORTED INCIDENT. TURNED ITEM IN TO HQ ON 18 JAN 2016.
52	SUSPECTED METAL AIRCRAFT PIECE	18 JAN 2016 / 1600	68-581 CROZIER DR CAMP HOMELANI BEACH (SECTOR B)			CIVILIAN FOUND ITEM AND REPORTED FINDING TO HQ.
53	WHITE LASTIC FIBERGLASS (13"X5")	18 JAN 2016 / 1500	KAIAKA BEACH PARK (SECTOR C) (EJ 9122 8739)			TEAM C BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
54	MISC OBJECTS / BOOT BLACK, BROKEN BLACK HOSE	18 JAN 2016 / 1500	KAIAKA BEACH PARK (SECTOR C) (EJ 9122 8739)			TEAM C BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ. RED LENS, MORE HOSE TANGLED IN CORRAL AT LOCATION STILL.
55	WHITE SANDBAG TYPE MATERIAL YELLOW PLASTIC "DANGER EXPLOSION", PLASTIC BLACK RING	18 JAN 2016 / 1800	MOKULEIA BEACH (SECTOR C) (EJ 8762 8665)			TEAM C BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
56	GRAY PLASTIC 16"X5"	18 JAN 2016 / 1705	MOKULEIA BEACH (SECTOR B (EJ 84439 86741)			TEAM B BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ. P/N 610-15574172
57	CHEM LIGHTS (2)	18 JAN 2016 / 1625	KAIENA POINT (SECTOR A) (EJ 7458 8595)			TEAM A BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
58	HARD LIGHT GRAY MISC PLASTIC PIECES	18 JAN 2016 / 1629	KAIENA POINT (SECTIOR A) (EJ 7494 8603)			TEAM A BEACH PATROL MARINES LOCATED ITEMS AND RELOCATED THE ITEMS TO HQ.
59	HARD BLACK RUBBER HOSE (12"X1")	18 JAN 2016 / 1710	PUAENA BEACH PARK (SECTOR D) (EJ92548921)			TEAM D BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
60	BLACK SCUBA GOGGLES/BURNT MILITARY ISSUE HAND SANITIZER	18 JAN 2016 / 1721	PUAENA BEACH PARK (SECTOR D) (EJ92768930)			TEAM D BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
61	CLEAR GLASS PIECES	18 JAN 2016 / 1430	MALAEKAHANA STREAM (SECTOR G) (09909730)	)(6) (b) (3) 10 USC § 1	6) (b) (3) 10 USC §	TEAM G-2 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
62	HARD BLACK PLASTIC PIECES/WHITE PLASTIC PIECES	18 JAN 2016 / 1610	NATIONAL WILDLIFE REFUGE (SECTOR G) (09119846)			TEAM G-2 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
63	GREY TUBE SOCK	18 JAN 2016 / 1633	UNIVERSITY OF HAWAII AGRICULTURAL EXPERIMENT STATION (SECTOR F) (0042698530)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
64	SMALL RUBBER HOSE	18 JAN 2016 / 1651	UNIVERSITY OF HAWAII AGRICULTURAL EXPERIMENT STATION (SECTOR F) (0068998650)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
65	SHREDDED MECHANICS GLOVE/RUBBER HOSE/METAL PIECES/GREEN INSULATION/FISHING LINE	18 JAN 2016 / 1700	UNIVERSITY OF HAWAII AGRICULTURAL EXPERIMENT STATION (SECTOR F) (0076198668)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
66	METAL PIECE WITH CHROME SURFACE	18 JAN 016 / 1715	WAIALEE GULCH (SECTOR F) (0101398839)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
67	HARD WHITE INSULATION SQUARE	18 JAN 2016 / 1736	WAIALEE (SECTOR F) (0122899075)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
68	HARD GREY MANGLED PLASTIC	18 JAN 2016 / 1802	WAIALEE (SECTOR F) (0173699438)			TEAM F BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
69	HARD BLACK PLASTIC PIECES	18 JAN 2016 / 1730	KAHUKU POINT (SECTOR G) (0510701224)			TEAM G-1 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
70	METAL POLE (11")	18 JAN 2016 / 1612	KUILIMA COVE (SECTOR G) (0406200537)			TEAM G-1 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
71	THREADED HARD RUBBER HOSE (BLACK/RED) (50")	18 JAN 2016 / 1759	KAHUKO POINT (SECTOR G) (0571800970)			TEAM G-1 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.

72	BLACK RUBBER RING	18 JAN 2016 / 1600	NATIONAL WILDLIFE REFUGE (SECTOR G) (09169823)	(b)(6) (b) (3) 10 USC § 130b		TEAM G-2 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
73	BLACK HOSES (2)	18 JAN 2016 / 1752	NATIONAL WILDLIFE REFUGE (SECTOR G) (07590023)			TEAM G-2 BEACH PATROL MARINES LOCATED ITEM AND RELOCATED THE ITEM TO HQ.
74	MANGLED METAL PIECE	18 JAN 2016 / 1745	TURTLE BAY (SECTOR G)			CIVILAIN CALLED IN, HPD HAS WRITTEN STATEMENT


RETURN MATE
DOCUMENT ENV
NSN 8105-00-334
BATTERY DATA
MFG
INS
EXP
02/14
07/15
07/18
UNIT SN 30000081
SERVICE/BATTERY
INSPECTION


ITER


AN/PRC-149 RADIO SET
MFR P/N 2155-0909300 MFR SD454
S/N
DATE
C/S ID No.
Tadiran Spectralink LTD.







(5 Ws)
CALL TO REPORT:

(b)(6), (b)(3)

TURTLE BAY

KAHUKU GOLF COURSE

HFD AIR PATROL

YMCA

MAHINAAI STREET

LIP OF BAY

POLICE BEACH

HQ

SATELLITE ROAD

HFD AIR PATROL

Situation Display from Haleiwa
Assets:
HFD Air One Helo - Patrol from Kahuku to Yokohama
then returning 200 yards offshore.
Marine Corp Shore Team Divisions
Ocean Safety Jet Skis (Yellow marks) Near Haleiwa


Cage (17V) 70167
PN (1P) 64510-103
S/N (S) 0010
NSN 4220-01-484-6130


U.S. COAST GUARD




OVERHAULED
10/2013
AIR CRUISERS
RATED CAPACITY 20 PERSONS


CARRYING CASE P/N 65794-SERIES
ACCESSORY CONTAINER (EMPTY) P/N 64612-SERIES
LIFERAFT ENCLOSURE ASSY P/N 65793-101
TOTAL SYSTEM WEIGHT OF ABOVE ITEMS NOT TO EXCE
S/N 2 0 C 0 2 1 3
DATE OF MANUFACTURE OCT 2010
FAA TSO-C70A TYPE I
RATED CAPACITY 20 P
OVERLOAD CAPACITY








U.S.
COAST
GUARD


Cage (17V) 70167
PN (1P) 64510-103
S/N (S) 0010
NSN 4220-01-484-6130


Debris 05
Debris 03
DEBRIS
DEBRIS
21-39.750N 158-06.770W
21-39.200N 158-03.700W
Debris 04
Oil Report 01
DEBRIS
Haleiwa
Waialua
21-34.900N 158-18.580W
21-35.810N 158-08.260W
Debris 02
DEBRIS
21-33.100N 158-15.400W
Debris 01
DEBRIS
21-30.000N 158-13.800W
Kahuku
Laie
Hauula
Kaaawa
Schofield Barracks
Wahiawa
Waipio




Kawela Bay
83
Kahuku
83
Laie
Haleiwa
Hauula
Punaluu
Waialua
NORTH SHORE
99
Mokuleia
Forest Reserve
803
Whitmore
Village
Ewa Forest
Reserve
93
Makua Kea'au
Forest Reserve
Schofield
Barracks
Wahiawā
Oahu Forest

Cage (17V) 70167

PN (1P) 64510-103

S/N (S) 20C0213

NSN 4220-01-484-6130

HIKVISION

DS-2CD2012-I(1.3MP)/DS-2CD2032-I(3MP)

IR Mini Bullet Network Camera

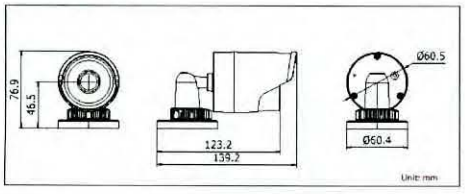




Key features

- 1.3MP / 3MP high resolution
- HD real-time video
- 3D DNR & DWDR & BLC
- IR LEDs: up to 30m
- IP66
- PoE
- Compact design
- Bracket included

Dimensions



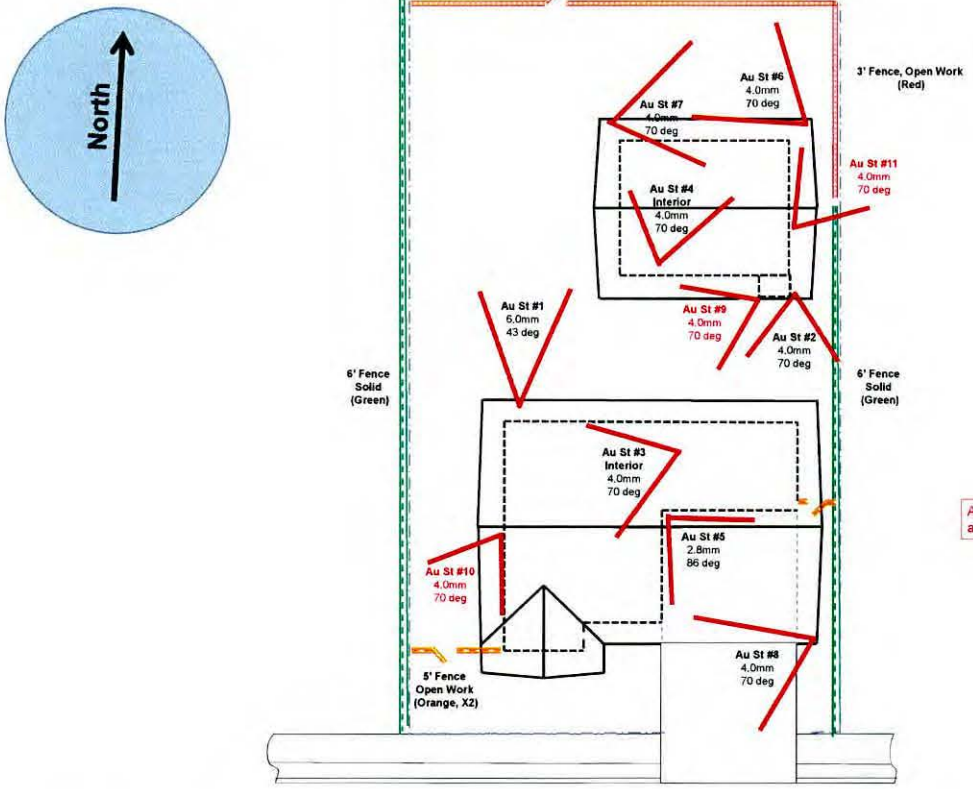
Available models

DS-2CD2012-I, DS-2CD2032-I

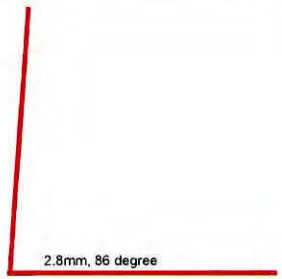
	DS-2CD2012-I	DS-2CD2032-I
Camera		
Image sensor	1/3" progressive scan CMOS	
Min. illumination	0.01 lux @F1.2, AGC ON, 0 lux with IR	0.07 lux @F1.2, AGC ON, 0 lux with IR
Shutter time	1/25s (1/30s) ~ 1/100,000s	
Lens	4mm@ F2.0 (6mm, 12mm optional)	4mm@ F2.0 (6mm, 12mm optional)
	Angle of view: 73.1°(4mm), 46°(6mm), 22°(12mm)	1920 × 1080:Angle of view: 79°(4mm), 49°(6mm), 23.2°(12mm) 2048 × 1536: Angle of view: 70°(4mm),43.3°(6mm), 20.6°(12mm)
Lens mount	M12	
Day & night	IR cut filter with auto switch	
Digital noise reduction	3D DNR	
Wide dynamic range	Digital WDR	
Compression Standard		
Video compression	H.264 / MJPEG	
H.264 codec profile	Main profile	
Bit rate	32 Kbps ~ 16 Mbps	
Dual stream	Yes	
Image		
Max. Image Resolution	1280 × 960	2048 × 1536
Frame rate	50 Hz: 25 fps (1280 × 960), 25 fps (1280 x 720), 25 fps (704 x 576), 25 fps (640 x 480) 60 Hz: 30 fps (1280 × 960), 30 fps (1280 x 720), 30 fps (704 x 576), 30 fps (640 x 480)	50Hz: 20fps (2048 x 1536), 25fps (1920 × 1080), 25fps (1280 x 720) 60Hz: 20fps (2048 x 1536), 30fps (1920 × 1080), 30fps (1280 x 720)
Image settings	Rotate mode,Saturation, brightness, contrast, sharpeness adjustable through client software or web browser	
BLC	Yes, zone configurable	
ROI	Yes, up to 4 configurable areas	
Network		
Network storage	NAS	
Alarm trigger	Motion detection, tampering alarm	
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP, PPPoE,NTP,UPnP,SMTP,SNMP,IGMP,802.1X,QoS,IPv6,Bonjour	
System compatibility	ONVIF, PSIA, CGI,ISAPI	
General functionalities	User Authentication, watermark, reset button	
Interface		
Communication interface	1 RJ45 10 M / 100 M Ethernet interface	
Reset Button	Yes	
General		
Operating conditions	-30 °C ~ 60 °C (-22°F ~ 140 °F) humidity 95% or less (non-condensing)	
Power supply	12 VDC ± 10% , PoE (802.3af)	
Power consumption	Max. 5W (max. 7W with ICR on)	
Weather proof rating	IP66	
IR range	Up to 30m	
Dimension	60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	
Weight	500g (1.1 lbs)	

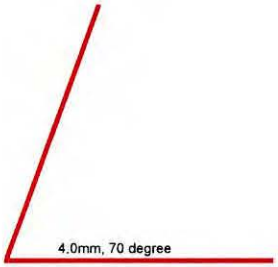
ENCLOSURE (176)

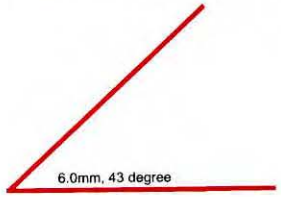
www.hikvision.com

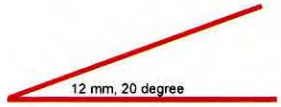


Camera Selection
(Field of View)









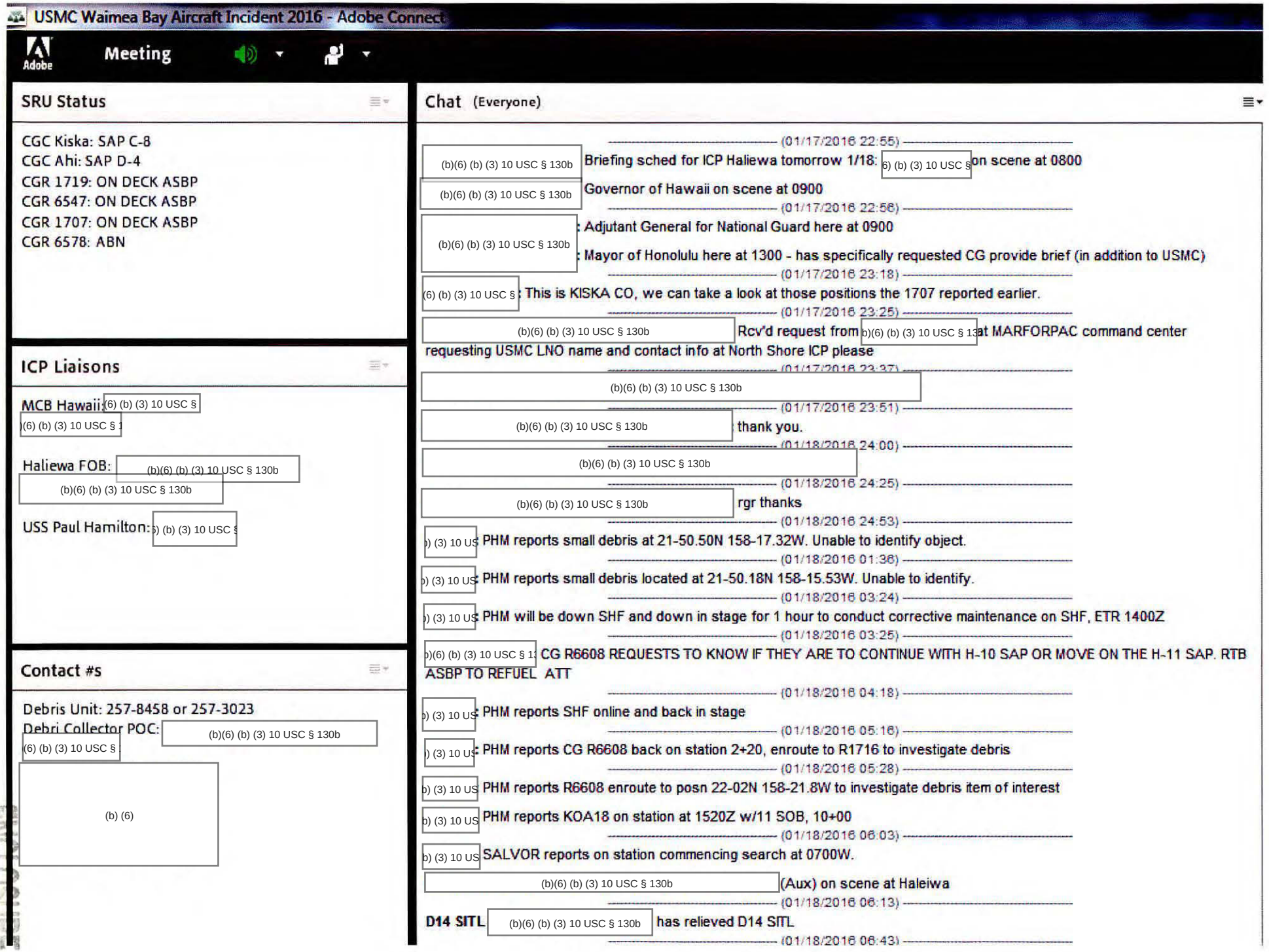
As of 09Jan2016, cameras 9, 10, and 11 are not installed

Camera Plan

68-253 Au St

Date: 06-Jan-2015
Project: Camera Plan
TMK#: 6 - 8 - 12:43

Sheet
L001
1 / 1


USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect
Meeting
SRU Status
CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN
ICP Liaisons
MCB Hawaii:
Haliewa FOB:
USS Paul Hamilton:
Contact #s
Debris Unit: 257-8458 or 257-3023
Debri Collector POC:
Chat (Everyone)
(01/17/2016 22:55)
Briefing sched for ICP Haliewa tomorrow 1/18:
on scene at 0800
Governor of Hawaii on scene at 0900
(01/17/2016 22:56)
: Adjutant General for National Guard here at 0900
: Mayor of Honolulu here at 1300 - has specifically requested CG provide brief (in addition to USMC)
(01/17/2016 23:18)
: This is KISKA CO, we can take a look at those positions the 1707 reported earlier.
(01/17/2016 23:25)
Rcv'd request from
at MARFORPAC command center requesting USMC LNO name and contact info at North Shore ICP please
(01/17/2016 23:37)
(01/17/2016 23:51)
thank you.
(01/18/2016 24:00)
(01/18/2016 24:25)
rgr thanks
(01/18/2016 24:53)
PHM reports small debris at 21-50.50N 158-17.32W. Unable to identify object.
(01/18/2016 01:36)
: PHM reports small debris located at 21-50.18N 158-15.53W. Unable to identify.
(01/18/2016 03:24)
: PHM will be down SHF and down in stage for 1 hour to conduct corrective maintenance on SHF, ETR 1400Z
(01/18/2016 03:25)
CG R6608 REQUESTS TO KNOW IF THEY ARE TO CONTINUE WITH H-10 SAP OR MOVE ON THE H-11 SAP. RTB ASBP TO REFUEL ATT
(01/18/2016 04:18)
: PHM reports SHF online and back in stage
(01/18/2016 05:16)
: PHM reports CG R6608 back on station 2+20, enroute to R1716 to investigate debris
(01/18/2016 05:28)
PHM reports R6608 enroute to posn 22-02N 158-21.8W to investigate debris item of interest
PHM reports KOA18 on station at 1520Z w/11 SOB, 10+00
(01/18/2016 06:03)
SALVOR reports on station commencing search at 0700W.
(Aux) on scene at Haleiwa
(01/18/2016 06:13)
D14 SITL
has relieved D14 SITL
(01/18/2016 06:43)

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Adobe Meeting

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (b)(6) (b) (3) 10 USC § (b)(6) (b) (3) 10 USC § 1

Haliewa FOB: (b)(6) (b) (3) 10 USC § 130b (b)(6) (b) (3) 10 USC § 130b

USS Paul Hamilton: (b) (3) 10 USC

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b)(6) (b) (3) 10 USC § 130b (b)(6) (b) (3) 10 USC § 1

(b) (6)

Chat (Everyone)

(b)(6) (b) (3) 10 USC § 13 Navy salvage team at the ICP now and requesting coordinates for where to begin search.

(01/18/2016 07:19)

(b)(6) (b) (3) 10 USC § 13 (b) (3) 10 USC delivered a 204 to the USNS SALVOR yesterday. Let me see if i can find a copy yere this has the coordinates in it

(01/18/2016 07:22)

(b)(6) (b) (3) 10 USC § 13 rob, still need it?

(01/18/2016 07:23)

(b)(6) (b) (3) 10 USC § 13 Can we post a copy of the 204 here please

(b)(6) (b) (3) 10 USC § 13 ok

(01/18/2016 07:31)

(b)(6) (b) (3) 10 USC § 13 Per the current 209 two larger peices positively confirmed as pieces of the aircraft that washed ashore in the area of Kahuku Point as well as several other smaller debris are not listed on the 209.

(01/18/2016 07:32)

(b)(6) (b) (3) 10 USC § 13 Navy MDSU GAR is 13 in the Green. High points were Environment and event complexity (due to bottom currents)

D14 SITL (b) (3) 10 USC : ICP: Is HPD air flying this morning?

(01/18/2016 07:39)

(b)(6) (b) (3) 10 USC § 13 HPD air is not flying at this time. I am still waiting confirmation from HPD wether they will be up later and at what time.

(01/18/2016 07:40)

D14 SITL (b) (3) 10 USC : 204 for SALVOR is posted

(01/18/2016 07:42)

(b)(6) (b) (3) 10 USC § 13 Requesting the time when CGC Kiska will be returning/will they be ready to offload so that Marines can send their trucks to meet them. Also what size/weight of objects are they bringing back in so that Marines can bring appropriate sized trucks.

(01/18/2016 07:46)

(b)(6) (b) (3) 10 USC § 13 HPD just related that they will have HPD air in the area at about 0830 and will also continue to help search the shoreline.

(01/18/2016 07:48)

(b)(6) (b) (3) 10 USC § 1 At this time I do not know when I'm departing scene today. I will ensure BSU Honolulu knows our ETA so the truck can meet us accordingly. The items I have aboard are: life raft (now deflated) weighing approx 100 lbs, a 6 foot piece of rotor blade weighing approx 25 lbs, and a crew flight bag weighing approx 10 lbs.

(01/18/2016 07:50)

(b)(6) (b) (3) 10 USC § 1 The transit from on scene to BSU Honolulu will be around a 3-4 hours transit (SOA 20 knots).

(01/18/2016 08:08)

D14 ICP Ops Section Chief: KISKA, discussed departure time with D14 SMC and you have permission to depart search area at 1600.

(01/18/2016 08:09)

SCC HONO CU: RCVD CG AUX AIR 8: OPS NML, POSN 21-13N 157-16W (OUC NTFD) 157.1 1809Z

(01/18/2016 08:11)

(b)(6) (b) (3) 10 USC § 13 FYSA: Aircraft parts recovered on 17 Jan at about 1700 from shoreline were recovered from the following

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Adobe Meeting

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (6) (b) (3) 10 USC §
)(6) (b) (3) 10 USC § 1

Haliewa FOB: (b)(6) (b) (3) 10 USC § 130b
(b)(6) (b) (3) 10 USC § 130b

USS Paul Hamilton:) (b) (3) 10 USC

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b)(6) (b) (3) 10 USC § 130b
)(6) (b) (3) 10 USC § 1

(b) (6)

Chat (Everyone)

b)(6) (b) (3) 10 USC § 13 need ASAP for (6) (b) (3) 10 USC §

(01/18/2016 08:30)

SCC HONO CU: R6578 AIRBORNE 1824Z

(01/18/2016 08:31)

SCC HONO CU: MDSU 1+2 U/W 1823Z

SCC HONO CU: SEARCH AREA CONTROL FREQ IS (b) (2) IS REQUESTING CONFIRMATION

(01/18/2016 08:36)

D14 SITL 6) (b) (3) 10 USC §:) (b) (3) 10 USC Governor brief inbound, ETA 5 mins

(01/18/2016 08:44)

D14 SITL 6) (b) (3) 10 USC §): Governor's brief sent

(01/18/2016 08:53)

b)(6) (b) (3) 10 USC § 13 HPD air enroute now from airport (ETA 10-15 minutes) to begin shorline area search in area of Laie and Kahuku

(01/18/2016 08:55)

SCC HONO CU: F/V FLIER REPORTS A 3X3' CURLED METAL PIECE WITH FOAM LINING POSN 21-48.3N 158-08.633W, WITH ORANGE FLOATING FOAM NEAR IT

(01/18/2016 08:57)

SCC HONO CU: BASKETBALL SIZED PLASTIC FLOAT ORANGE IN COLOR

(b)(6) (b) (3) 10 USC § 13 .ppt received and printed. Thank you

(01/18/2016 08:59)

USMC CDO: CDO Report: Possible lead IRT stolen debris. WHO: (b) (6) (Former Marine) WHAT: Large waterproof case WHEN: Around 0830 on 18 January 2016 WHERE: (b) (6) Additional Information: (b) (6) (b) (6) (Former Marine) contact CDO to inform him that he saw his neighbor (name unknown) located at the address above, unload a large waterproof container/case and a metal detector from the back of his pickup truck. (b) (6) believes that this debris may be from the crash site. (b) (6) cell phone number is (b) (6) mentioned to CDO that he has pictures of this container. CDO informed (b) (6) to stand by and if we need to contact him, we will.

(01/18/2016 09:07)

D14 SITL 6) (b) (3) 10 USC §: MUDSU reported they are 05 minutes out from commencing the first ROV dive. O/S wx: light winds, 3-4 ft. swells, vis unlimited, sea temp 78

(01/18/2016 09:12)

(6) (b) (3) 10 USC §: D14, SCC Honolulu de KISKA: Once released at 1600HST, I will transit to BSU Honolulu (SOA 20 kts) with an ETA 1845. At the one hour mark of mooring I will contact SCC to ensure a truck is enroute to pick up debris.

D14 SITL 6) (b) (3) 10 USC §): Brief which is to be provided to the Governor is posted in file share. Titled "Governors brief Jan 18 0700"

(01/18/2016 09:17)

SCC HONO CU: KISKA SCC HONO COPIES

(01/18/2016 09:35)

b)(6) (b) (3) 10 USC § 13 Governor just arrived at ICP

(01/18/2016 09:38)

D14 ICP Ops Section Chief: KISKA, confirmed that USMC debris collection team will be at the pier at 1845.

SCC HONO CU: AHI WANTS TO KNOW IF THEY CAN GO TO THAT DEBRIS I REPORTED THEY ARE 3NM FROM IT, AND WANT TO KNOW IF WE WANT IT RETRIEVED OR ID'D

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (6) (b) (3) 10 USC § 1
)(6) (b) (3) 10 USC § 1

Haliewa FOB: (b)(6) (b) (3) 10 USC § 130b
(b)(6) (b) (3) 10 USC § 130b

USS Paul Hamilton:) (b) (3) 10 USC

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector (b)(6) (b) (3) 10 USC § 130b
)(6) (b) (3) 10 USC § 1

(b) (6)

Chat (Everyone)

SCC HONO OU: MCBH Hawaii has been notified of both peices of debris

(01/18/2016 10:21)

USMC CDO (b)(6) (b) (3) 10 USC § 130 contacts MCBH CDO at the EOC regarding located debris:

USMC CDO: 1. 2148.8N 15808.88W Coast Guard Vessel Ahi retrieving 3x3 foot piece of gray fiberglass that smells of fuel

USMC CDO: 2. 2150.54N 15810.353W Identified by Fishing Vessel Great White/Marlin 4x4 foot dark gray/black/brown piece of debris (possible door)

(01/18/2016 10:36)

SCC HONO OU: CGC Kiska fuel for 0600 is confirmed

(01/18/2016 10:40)

SCC HONO OU: HSN aircraft changed tail #'s they will be Rescue 43

(01/18/2016 10:47)

b)(6) (b) (3) 10 USC § 13: 0738 Marine Shore Patrol found Black equipment bag smelling of Gas. Position near easternmost search area near Makahoa PT. Marines considering expanding afternoon search/adding team to area further East to Laie based on Bag confirmation. Coordinates 21 40.811 N, 157 56.610 W

USMC CDO: CDO receives call from (b)(6) (b) (3) 10 USC § 130b claiming to see hand sizes pieces of metal debris on the beach behind Camp Honelani Mokuleia at around 1040 AM

(01/18/2016 11:09)

)(6) (b) (3) 10 USC § 1 de KISKA, rgr good copy on fuel confirmation. Be advised, we are 100% complete with SAP H9 with NegRes, request new SAP.

(01/18/2016 11:17)

D14 SITL 6) (b) (3) 10 USC §: MDSU-1 completed 2nd ROV dive. Found two small pieces of aircraft debris 100yds SW of LKP, will shift search area towards this area. awaiting photos

(01/18/2016 11:32)

D14 SITL 6) (b) (3) 10 USC §: MDSU-1 reported receiving a "ping from a locator", using a hand help sonar. awaiting lat/long of that location

(01/18/2016 11:43)

Kevin Edes: SCC Honolulu launching a MH-65 & STA Honolulu for a PW SAR case ivo Penguin Banks

D14 CDO 6) (b) (3) 10 USC §: PHM reports Rescue43 located half inflated life raft in position 21-45.79N 158-00.17W. PHM is coordinating with KISKA to recover.

D14 CDO 6) (b) (3) 10 USC §: KISKA is diverted awaiting ETA

D14 ICP Ops Section Chief: D14 CDO, roger, briefed Deputy Unified Commander

(01/18/2016 12:08)

(6) (b) (3) 10 USC §: de KISKA, ETA to liferaft 30 mins

(01/18/2016 12:10)

CDR 6) (b) (3) 10 USC §: HFD air just reported a visual on an unknown large piece of debris at 21 34.93N 158 14.27W

(01/18/2016 12:14)

D14 SITL 6) (b) (3) 10 USC §: MDSU-1 is in position over pinger location, deploying ROV

(01/18/2016 12:18)

D14 SITL 6) (b) (3) 10 USC §: MDSU-1 over pinger location. Position 21-38.0407N/158-07.558W. Depth of water- 325ft., ROV is being

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Adobe Meeting

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (6) (b) (3) 10 USC §
b)(6) (b) (3) 10 USC § 13

Haliewa FOB: (b)(6) (b) (3) 10 USC § 130b
(b)(6) (b) (3) 10 USC § 130b

USS Paul Hamilton:) (b) (3) 10 USC

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b)(6) (b) (3) 10 USC § 130b
(6) (b) (3) 10 USC § 1

(b) (6)

Chat (Everyone)

SCC HONO CU: NOTHING IN THE LIFERAFT, BARELY INFLATED

SCC HONO CU: PICKED IT UP, WILL SEND PICTURES

(01/18/2016 12:58)

b)(6) (b) (3) 10 USC § 13: Mayor just arrived at ICP

(01/18/2016 13:02)

SCC HONO CU: MDSU DIVE BOATS RTB, BOAT CASUALTY, ETA TO HARBOR 1320

(01/18/2016 13:14)

D14 ICP Ops Section Chief: SCC Hono, roger are they able to RTB under own power?

(01/18/2016 13:17)

D14 SITL) (b) (3) 10 USC §: SCC Hono, which MDSU boat was it and what capability (ROV, sonar, etc) did we lose?

(01/18/2016 13:20)

) (b) (3) 10 USC § D14: the whaler boat suffered the engine cas. RHIB is operational. Both boats just moored up.

(b)(6) (b) (3) 10 USC § 130 has the ROV onboard

D14 SITL 6) (b) (3) 10 USC §: RGR, thanks

D14 SITL (b)(6) (b) (3) 10 USC § 130b, can we get an update of how many Marine's are conducting shoreline searches?

(01/18/2016 13:27)

D14 SITL) (b) (3) 10 USC §: ICP Haiewa has lost HSIN connection

(01/18/2016 13:32)

D14 SITL) (b) (3) 10 USC §: Current debris plot and excel spreadsheet of items has been posted to file share

(01/18/2016 13:42)

Haleiwa ICP: ICP Haleiwa back online

(01/18/2016 13:44)

USMC CDO: (b) (6) (Civilian) contact CDO with information on possible debris. She claims to have seen a roughly 6 foot tan(ish) color piece of debris floating in the water approximately 100-200 yards from shoreline at the reef just where the surf breaks near her residence on Crozier Dr. Her contact info is (b) (6)

(01/18/2016 13:48)

Haleiwa ICP: USMC shoreline teams to remain the same as this morning. Conducting searches at 1430

(01/18/2016 14:07)

Haleiwa ICP: 1405 MDSU Departed Haleiwa Harbor

(01/18/2016 14:09)

Haleiwa ICP: MDSU Heading to position 21-38.0140 N 158-07.5417W. MDSU heard sounds from two 'pingers' at this location. Plan is to deploy ROV at this location this afternooon.

D14 SITL 6) (b) (3) 10 USC §: MDSU-1 heading back out, ETR 1430. Their 27' Whaler is OOC due to excessive water in bilge

(01/18/2016 14:14)

D14 SITL 6) (b) (3) 10 USC §: two pings located in same location. 21-38.0140N 158-07.5417W, 330' ft. of water

(01/18/2016 14:16)

D14 SITL 6) (b) (3) 10 USC §: emitted on 37.5 (+-1) KHZ, received on 121.5 or 243 MHZ

Haleiwa ICP: MDSU-1 also reported seeing a sheen on surface at 'pinging" site

(01/18/2016 14:23)

D14 SITL (6) (b) (3) 10 USC § MDSU-1 back UAW, 25-30 min transit time. They will contact SCC to take radio guard

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting | Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii (b) (3) 10 USC § 130b (b) (3) 10 USC § 130b

Haliewa FOB: (b) (3) 10 USC § 130b (b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023

Debri Collector POC: (b) (3) 10 USC § 130b (b)(6) (b) (3) 10 USC § 130b

(b) (6)

Attendee List (21)

- Hosts (0)
- Presenters (0)
- Participants (21)

(b)(6) (b) (3) 10 USC § 13

Chat (Everyone)

Honolulu at 1600 HST (0200Z) for debris drop off and logistics, k

---------- (01/18/2016 16:00) ----------

D14 ICP Ops Section Chief: KISKA, roger, you are authorized to depart search location at 1600W and transit to homeport. USMC debris recovery team will meet you at the pier at appros 1845. Fuel arranged for Tuesday morning.

---------- (01/18/2016 16:12) ----------

D14 SITL (b) (3) 10 USC: CO of SALVOR reports that airframes of both helicopters have been found by the ROV

D14 SITL (b) (3) 10 USC: official times and locations will be posted once received

---------- (01/18/2016 16:18) ----------

SCC HONO CU: CGC AHI AND CG R1716 ENR N SHORE OAHU AFTER 3 MISSING DIVER SEARCH RESOLVED

---------- (01/18/2016 16:26) ----------

D14 SITL (b) (3) 10 USC: MDSU-1 reports they lost video feed to the ROV, it is being recovered

---------- (01/18/2016 16:40) ----------

D14 SITL (b) (3) 10 USC: MDSU-1 reports mechanical failure of ROV. Is securing ops for the day, expect to resume ops at 0800 tomorrow

---------- (01/18/2016 16:42) ----------

D14 SITL (b) (3) 10 USC: MDSU-1 cannot visually confirm both helicopters, reported "part of fuselage". Can confirm two separate pingers

---------- (01/18/2016 17:51) ----------

Haleiwa ICP: Spoke with MDSU-1 personnel. Initial passed report of a "fuselage" is inaccurate. The biggest piece of debris encountered by ROV was described as a "rib". Dimensions were approx 10-15 ft long by about 5ft high. There was an additional metal rectangular or cylindrical object attached to teh rib that stuck up another 5ft.

Haleiwa ICP: No pictures or video are available of the "rib"

---------- (01/18/2016 17:53) ----------

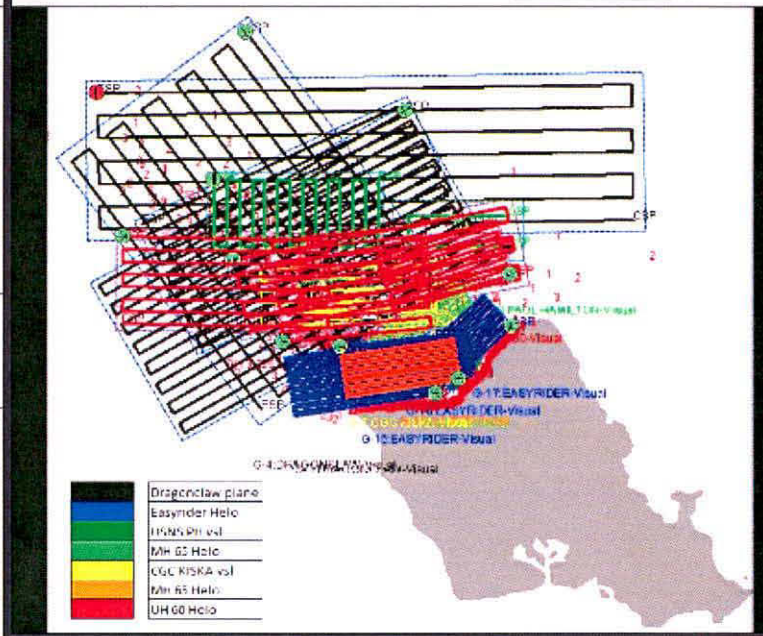
Haleiwa ICP: In same area, ROV sonar also identified other large pieces of debris. Video feed was lost before ROV could investigate other large sonar images. PLan for tomorrow is to return to area and investigate other large sonar pieces.

---------- (01/18/2016 17:56) ----------

Everyone

Golf as of 0600 17Jan16.JPG

Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting | Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (b) (3) 10 USC § (b) (3) 10 USC §

Haliewa FOB: (b) (3) 10 USC

(b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b) (3) 10 US

(b)(6) (b) (3) 10 USC § 130b

(b) (6)

Attendee List (21)

Hosts (0)
Presenters (0)
Participants (21)

(b)(6) (b) (3) 10 USC § 1

Chat (Everyone)

sonar images. PLan for tomorrow is to return to area and investigate other large sonar pieces.

(01/18/2016 17:56)

(b) (3) 10 USC §: D14 SITL has been relieved by (b) (3) 10 USC

Haleiwa ICP: Area was described as a "debris field" with other smaller metal pieces visible. One piece of metal was positively identified by a Marines investigator as a portion of an "EAPS" Engine Air Particle Separator. Pictur

Haleiwa ICP: Picture of EAPS available and sent to SITL

(01/18/2016 18:03)

Haleiwa ICP: For clarification, Video is not available becuase when ROV is operating in record mode sonar and mobility functions are diminished. Priority was covering maximum search area. Picture sent was a picture taken of the actual ROV video screen when they encountered the EAPS.

(01/18/2016 18:07)

Haleiwa ICP: Area is marked by buoy. Coordinates: 21-38.0964N 158-7.3306W

(01/18/2016 18:08)

Haleiwa ICP: Water depth of area explored was between 280 and 300ft.

(01/18/2016 18:15)

Haleiwa ICP: MDSU-1 personnel continued to observe a slight sheen and "bubbles" of petroleum product on surface in area.

(01/18/2016 18:38)

Leoan Concepcion: RCVD CG 1716: FON, POSN: 20-05N 158-54W

(01/18/2016 19:06)

MCB HI LNO (b) (3) 10 USC §: I am departing the MCB EOC, please contact my cell if you need me.- (b) (3) 10 USC §

MCBH_CDO1: One military style sock was located on the beach at Waiale-E Gulch The last two emails where both found by the search teams. Silver in color fiber glass debris, approximately 2 x 3 ft, was located on the beach of Kaihalulu.

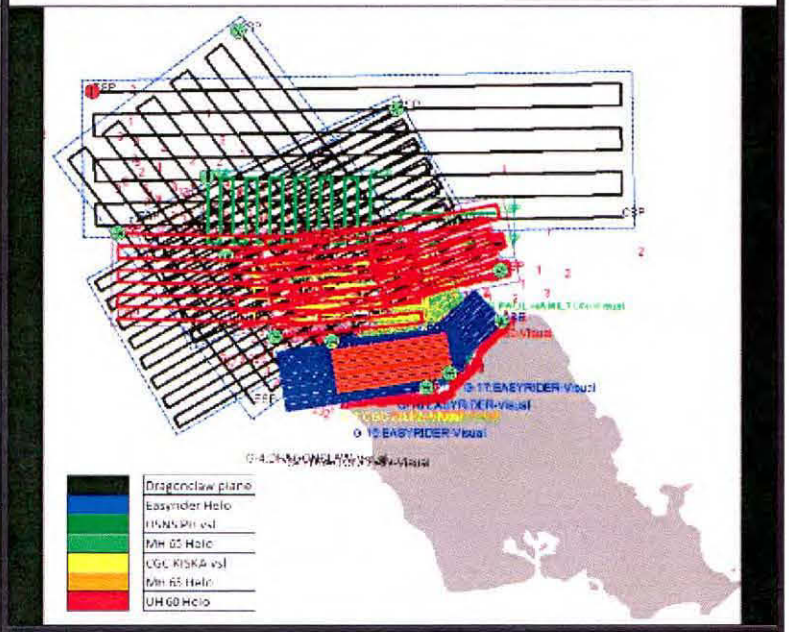
MCBH_CDO1: Cell phone was turned in by a civilian that washed up on shore in Kai. Black in color rubber hose, approximately 1 ft long, was located on Waiale-E Gulch by search team

(01/18/2016 19:08)

Everyone

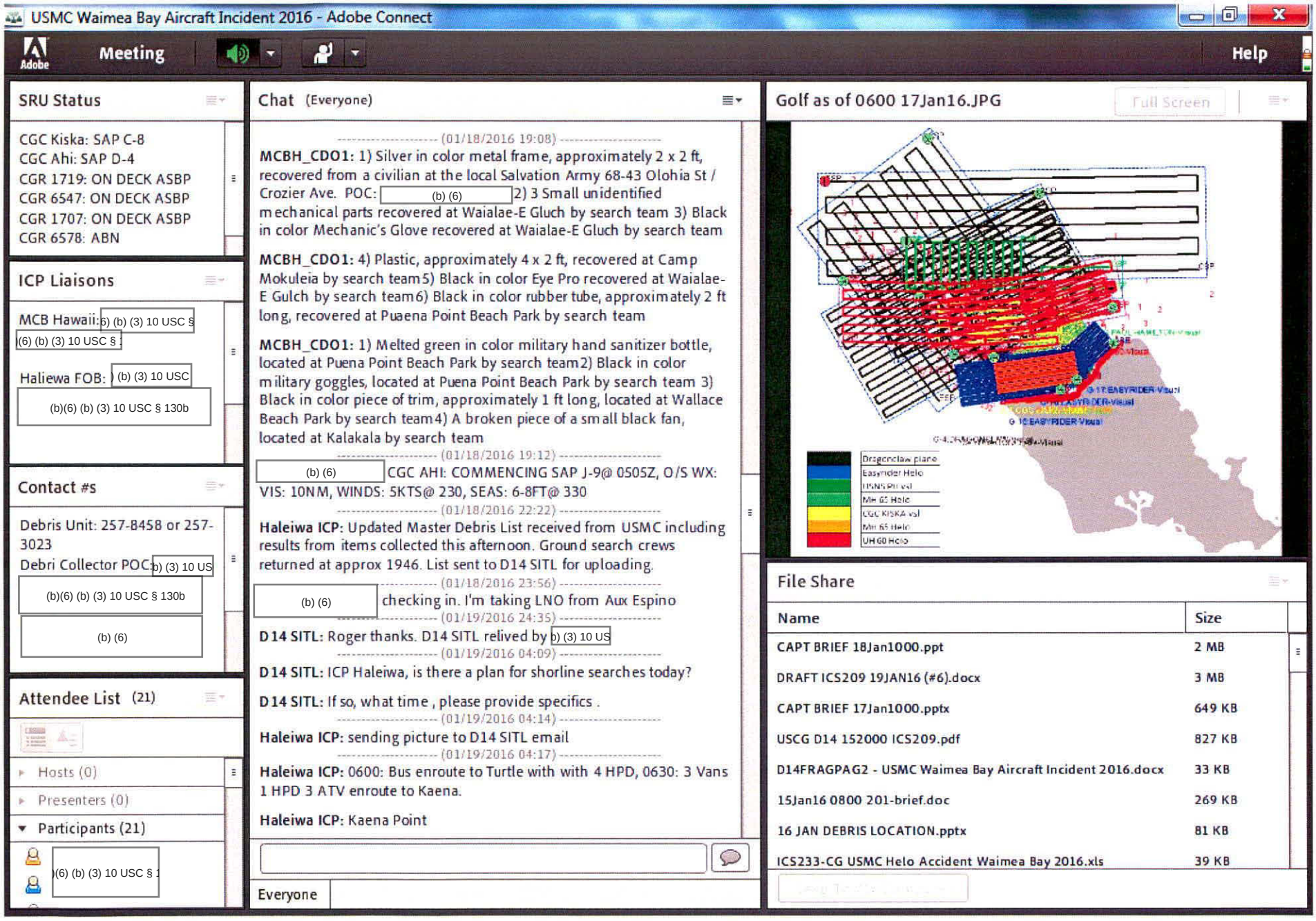
Golf as of 0600 17Jan16.JPG

Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB


USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect
Meeting
Help
SRU Status
CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN
ICP Liaisons
MCB Hawaii: (b) (3) 10 USC §
(b) (3) 10 USC §
Haliewa FOB: (b) (3) 10 USC
(b)(6) (b) (3) 10 USC § 130b
Contact #s
Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b) (3) 10 US
(b)(6) (b) (3) 10 USC § 130b
(b) (6)
Attendee List (21)
Hosts (0)
Presenters (0)
Participants (21)
(b) (3) 10 USC §
Chat (Everyone)
(01/18/2016 19:08)
MCBH_CDO1: 1) Silver in color metal frame, approximately 2 x 2 ft, recovered from a civilian at the local Salvation Army 68-43 Olohia St / Crozier Ave. POC: (b) (6) 2) 3 Small unidentified mechanical parts recovered at Waialae-E Gluch by search team 3) Black in color Mechanic's Glove recovered at Waialae-E Gluch by search team
MCBH_CDO1: 4) Plastic, approximately 4 x 2 ft, recovered at Camp Mokuleia by search team5) Black in color Eye Pro recovered at Waialae-E Gulch by search team6) Black in color rubber tube, approximately 2 ft long, recovered at Puaena Point Beach Park by search team
MCBH_CDO1: 1) Melted green in color military hand sanitizer bottle, located at Puena Point Beach Park by search team2) Black in color military goggles, located at Puena Point Beach Park by search team 3) Black in color piece of trim, approximately 1 ft long, located at Wallace Beach Park by search team4) A broken piece of a small black fan, located at Kalakala by search team
(01/18/2016 19:12)
(b) (6) CGC AHI: COMMENCING SAP J-9@ 0505Z, O/S WX: VIS: 10NM, WINDS: 5KTS@ 230, SEAS: 6-8FT@ 330
(01/18/2016 22:22)
Haleiwa ICP: Updated Master Debris List received from USMC including results from items collected this afternoon. Ground search crews returned at approx 1946. List sent to D14 SITL for uploading.
(01/18/2016 23:56)
(b) (6) checking in. I'm taking LNO from Aux Espino
(01/19/2016 24:35)
D14 SITL: Roger thanks. D14 SITL relived by (b) (3) 10 US
(01/19/2016 04:09)
D14 SITL: ICP Haleiwa, is there a plan for shorline searches today?
D14 SITL: If so, what time , please provide specifics .
(01/19/2016 04:14)
Haleiwa ICP: sending picture to D14 SITL email
(01/19/2016 04:17)
Haleiwa ICP: 0600: Bus enroute to Turtle with with 4 HPD, 0630: 3 Vans 1 HPD 3 ATV enroute to Kaena.
Haleiwa ICP: Kaena Point
Everyone
Golf as of 0600 17Jan16.JPG
Full Screen
Dragonclaw plane
Easyrider Helo
HSNS Pri vsl
MH 65 Helo
CGC KISKA vsl
MH 65 Helo
UH 60 Helo
File Share
Name
Size
CAPT BRIEF 18Jan1000.ppt 2 MB
DRAFT ICS209 19JAN16 (#6).docx 3 MB
CAPT BRIEF 17Jan1000.pptx 649 KB
USCG D14 152000 ICS209.pdf 827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx 33 KB
15Jan16 0800 201-brief.doc 269 KB
16 JAN DEBRIS LOCATION.pptx 81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls 39 KB

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting

Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (6) (b) (3) 10 USC § (6) (b) (3) 10 USC §

Haliewa FOB: (b) (3) 10 USC

(b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023

Debri Collector POC: (b) (3) 10 US

(b)(6) (b) (3) 10 USC § 130b

(b) (6)

Attendee List (21)

Hosts (0)

Presenters (0)

Participants (21)

(b)(6) (b) (3) 10 USC § 130b

Chat (Everyone)

Haleiwa ICP: Kaena Point

(01/19/2016 04:25)

D14 SITL: Roger, thanks.

(01/19/2016 04:29)

(b)(6) (b) (3) 10 USC § 130b Shoreline debris search planned for ICP Haleiwa this morning?

(01/19/2016 04:35)

Haleiwa ICP: Yes sir. That's what's on board at this moment.

(01/19/2016 04:37)

D14 OPS Section Chief - (6) (b) (3) 10 USC § : Is Ocean safety providing jet ski's again?

Haleiwa ICP: Yes sir. they will be on station at 0830

D14 OPS Section Chief - (6) (b) (3) 10 USC § : Thanks!

Haleiwa ICP: D14 SITL did you receive me email?

(01/19/2016 04:40)

D14 SITL: Yes, recieved.

(01/19/2016 04:42)

(b)(6) (b) (3) 10 USC § 13 **D14 PSC:** what time will the shoreline search for debris begin today please and how many people involved

(b)(6) (b) (3) 10 USC § 13 **D14 PSC:** is this search using marines?

(01/19/2016 04:49)

Haleiwa ICP: 0600 a bus and 4 HPD will be departing Haleiwa ICP enroute Turtle Bay for shoreline search. 0630 three vans, one HPD, and three ATV will be enroute to Kaena Point for shoreline search. Approx 80 marines total

(01/19/2016 04:53)

(b)(6) (b) (3) 10 USC § 13 **D14 PSC:** thank you

(01/19/2016 05:14)

(b)(6) (b) (3) 10 USC § 1 **D14 PSC:** Need help posting documents

(01/19/2016 05:24)

(b)(6) (b) (3) 10 USC § 1 **D14 PSC:** any "hosts" or "presenters" who can upgrade my access?

(01/19/2016 05:39)

(b) (6) Marines are mustering for their morning brief.

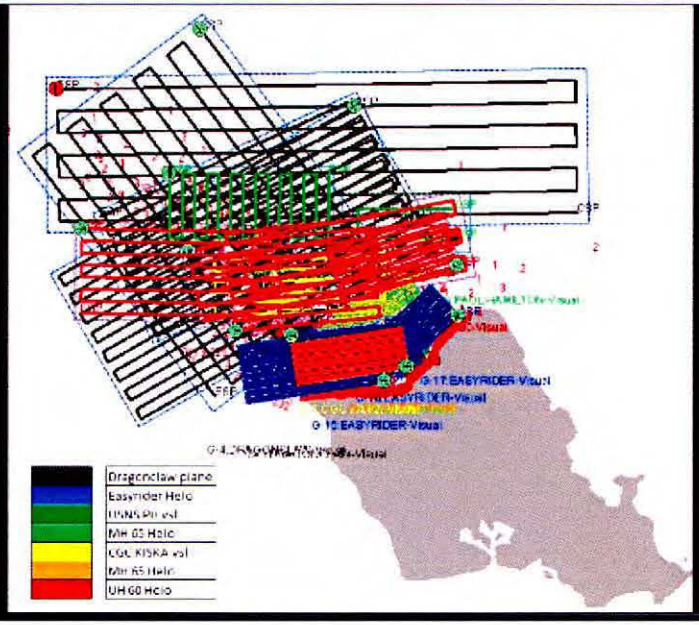
(01/19/2016 05:41)

(b)(6) (b) (3) 10 USC § 130b have arrived.

Everyone

Golf as of 0600 17Jan16.JPG

Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting | Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (b) (6) (b) (3) 10 USC § 6) (b) (3) 10 USC §

Haliewa FOB:) (b) (3) 10 USC

(b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023

Debri Collector POC: b) (3) 10 US

(b)(6) (b) (3) 10 USC § 130b

(b) (6)

Attendee List (21)

Hosts (0)

Presenters (0)

Participants (21)

)(6) (b) (3) 10 USC § 1

Chat (Everyone)

(b) (6) (b)(6) (b) (3) 10 USC § 130b have arrived.

(01/19/2016 05:44)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** do either have "host" or "presenter" permission?

(01/19/2016 05:49)

(b) (6) 6) (b) (3) 10 USC § upgraded to host.

(01/19/2016 05:51)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** thank you

(01/19/2016 06:03)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** Just posted draft ICS209 for today's brief at 0800 DRAFT DRAFT

(01/19/2016 06:05)

)(6) (b) (3) 10 USC § 1 Can you pleasemail (b) (3) 10 USC a copy of the draft 209 so I can have it printed up here in Haleiwa? thnx

(b)(6) (b) (3) 10 USC § 130b

(01/19/2016 06:08)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** Just posted "General's Brief" for the 0800 brief

(b)(6) (b) (3) 10 USC § 130b has arrived.

(01/19/2016 06:17)

MCBH EOC: MCBH EOC would like to confirm morning conference call time

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** 0800

MCBH EOC: Awaiting our LNO. Could you confirm phone number and passcode

(01/19/2016 06:20)

(b)(6) (b) (3) 10 USC § 130b

MCBH EOC: Thank You

(01/19/2016 06:25)

(6) (b) (3) 10 USC § : Verify there will be HPD escort for Marine walking teams this morning.

(01/19/2016 06:27)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** You are welcome. (b) (3) 10 USC just checked into D14 OC

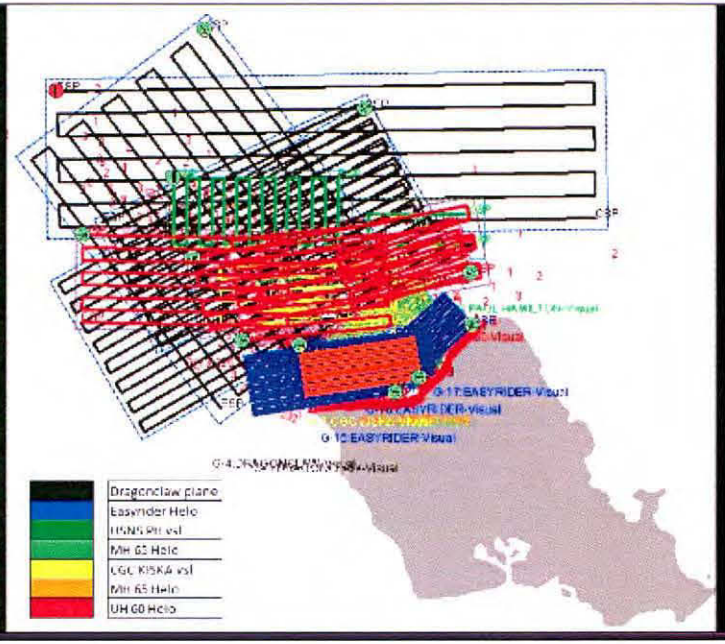
(01/19/2016 06:43)

b)(6) (b) (3) 10 USC § 13 **D14 PSC:** D14 PSC departing. b) (b) (3) 10 USC staking

Everyone

Golf as of 0600 17Jan16.JPG

Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Meeting | Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (b) (3) 10 USC §
(6) (b) (3) 10 USC §
Haliewa FOB: (b) (3) 10 USC §
(b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b) (3) 10 US
(b)(6) (b) (3) 10 USC § 130b
(b) (6)

Attendee List (21)

Hosts (0)
Presenters (0)
Participants (21)
(6) (b) (3) 10 USC § 1

Chat (Everyone)

(01/19/2016 06:43)
(b)(6) (b) (3) 10 USC § 13 **D14 PSC:** D14 PSC departing. (b) 10 USC 130b taking over

(b)(6) (b) (3) 10 USC § 13 **D14 PSC:** thanks all

(01/19/2016 06:44)
(6) (b) (3) 10 USC § HPD Escorts yes x8

(01/19/2016 07:19)
(6) (b) (3) 10 USC § ICP: any idea when MDSU will begin ops today?

(01/19/2016 07:22)
SCC HONO CU: YESTERDAY EVENING IT WAS REPORTED 0800

(01/19/2016 07:36)
D14 ICP Ops Section Chief: CG LNO at Haleiwa ICP conducted operational risk management discussion with MDSU-1 team. GAR score 13 in the green. CG Unified Commander authorized operations to commence. Estimated u/w time 0800.

(01/19/2016 07:38)
MCBH LNO (b)(6) (b) (3) 10 USC § 130b here at MCBH EOC. Unable to update ICP Liaisons, but I'm the MCBH LNO for today. My cell is (6) (b) (3) 10 USC §

(01/19/2016 07:45)
(6) (b) (3) 10 USC § ICP: is any state air assets flying today?

(01/19/2016 07:50)
(6) (b) (3) 10 USC § 1 HFD will commence fkying about 0830. HPD will not be flying today.

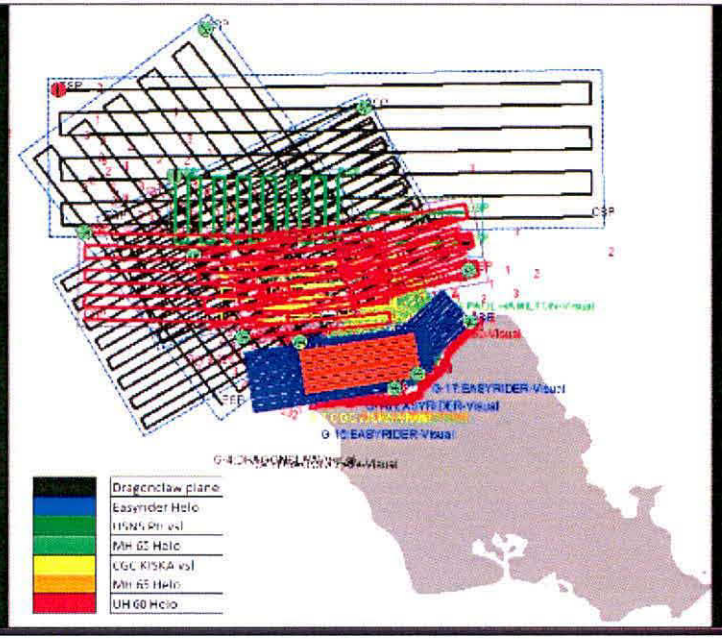
(01/19/2016 08:00)
(6) (b) (3) 10 USC § 1 Can Someone email me the latest SLDMB graphic?
(b)(6) (b) (3) 10 USC § 130b

(01/19/2016 08:55)
(6) (b) (3) 10 USC § MDSU-1 on-scene and dropping ROV/ approx. 0840

(01/19/2016 09:07)
(b)(6) (b) (3) 10 USC § 130b Good Morning, Everyone. (b) (3) 10 USC your Safety Officer. In the afternoons, it will be (6) (b) (3) 10 USC § By direction from Unified Command, we would like to congratulate everyone by being extremely safe out there. However, as we move into the 5th day of the SAR operations, keep maitaining situational awareness at all times. Drink plenty of fluids (water and/or gatorade) and work as a team. If someone feels tired or needs someone to drive them home, please don't hesitate to contact the Situation Unit phone number (808-

Everyone

Golf as of 0600 17Jan16.JPG | Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB

USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect

Adobe Meeting Help

SRU Status

CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
CGR 6578: ABN

ICP Liaisons

MCB Hawaii: (b) (3) 10 USC § 6) (b) (3) 10 USC §

Haliewa FOB: (b) (3) 10 USC

(b)(6) (b) (3) 10 USC § 130b

Contact #s

Debris Unit: 257-8458 or 257-3023
Debri Collector POC: (b) (3) 10 US

(b)(6) (b) (3) 10 USC § 130b

(b) (6)

Attendee List (21)

Hosts (0)
Presenters (0)
Participants (21)

)(6) (b) (3) 10 USC § 1

Chat (Everyone)

(b) (3) 10 USC §: ICP: is any state air assets flying today?

(01/19/2016 07:50)

)(6) (b) (3) 10 USC § 1 HFD will commence fkying about 0830. HPD will not be flying today.

(01/19/2016 08:00)

(6) (b) (3) 10 USC §: Can Someone email me the latest SLDMB graphic?

(b)(6) (b) (3) 10 USC § 130b

(01/19/2016 08:55)

(6) (b) (3) 10 USC § MDSU-1 on-scene and dropping ROV/ approx. 0840

(01/19/2016 09:07)

(b)(6) (b) (3) 10 USC § 130b: Good Morning, Everyone. (b) (3) 10 US(your Safety Officer. In the afternoons, it will be) (b) (3) 10 USC . By direction from Unified Command, we would like to congratulate everyone by being extremely safe out there. However, as we move into the 5th day of the SAR operations, keep maitaining situational awareness at all times. Drink plenty of fluids (water and/or gatorade) and work as a team. If someone feels tired or needs someone to drive them home, please don't hesitate to contact the Situation Unit phone number (808-535-3215) or directly to me (6) (b) (3) 10 USC § Keep a smooth and safe operation at all times!

(01/19/2016 09:35)

D14 SITL: (b) (3) 10 USC has relieved D14 SITL

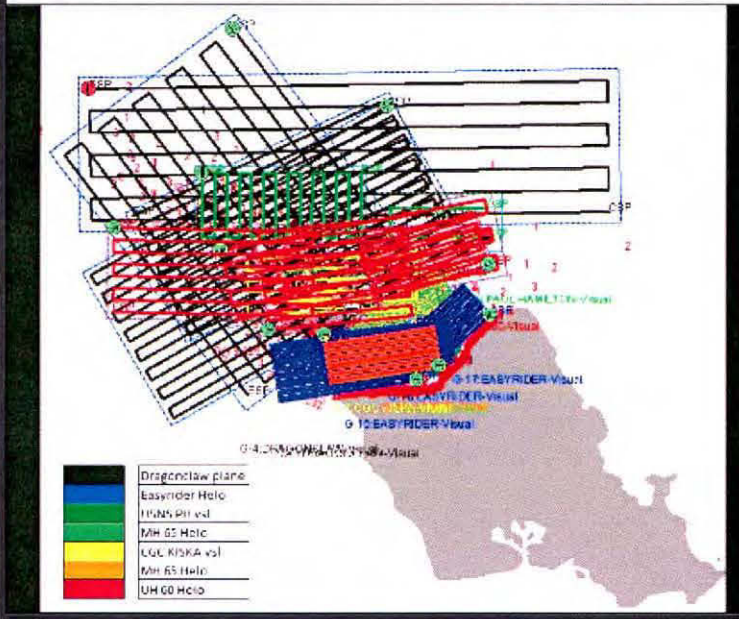
(01/19/2016 09:44)

MCBH_CDO 3: Search Team Debris update: The following items have been found by the search team from 0745 to 0915 this morning. (1) Metal debris, aprox 4x1 ft long at Mokuleia Beach (2) Danger Poison sign, aprox 2x1 ft located at Keekee Gulch (3) Black in color cloth @ Aweowed Beach Park (4) Insulation belonging to the aircraft at Mokuleia Army Beach (5) Metal circular ring at Aweowed Beach Park (6) Black back pack waist strap @ Keekee Gulch (7) Black plastic square 2x2 ft, no location reported (8) Metal 1 ft rod, no location reported (9) Small plastic parts and chem light in package, no location reported (10) Rubber and metal piece aprox 1 ft long, no location reported (11) Metal debris aprox 2x2 ft and black in color tubing aprox 6 ft long, no location reported (12) A green/tan rubber mask piece, no location reported (13) Two black and white socks that appeared to have blood on them, no location reported (14) Gray in color GoPro Hero 4 in waterproof case with flotation device, no location reported

Everyone

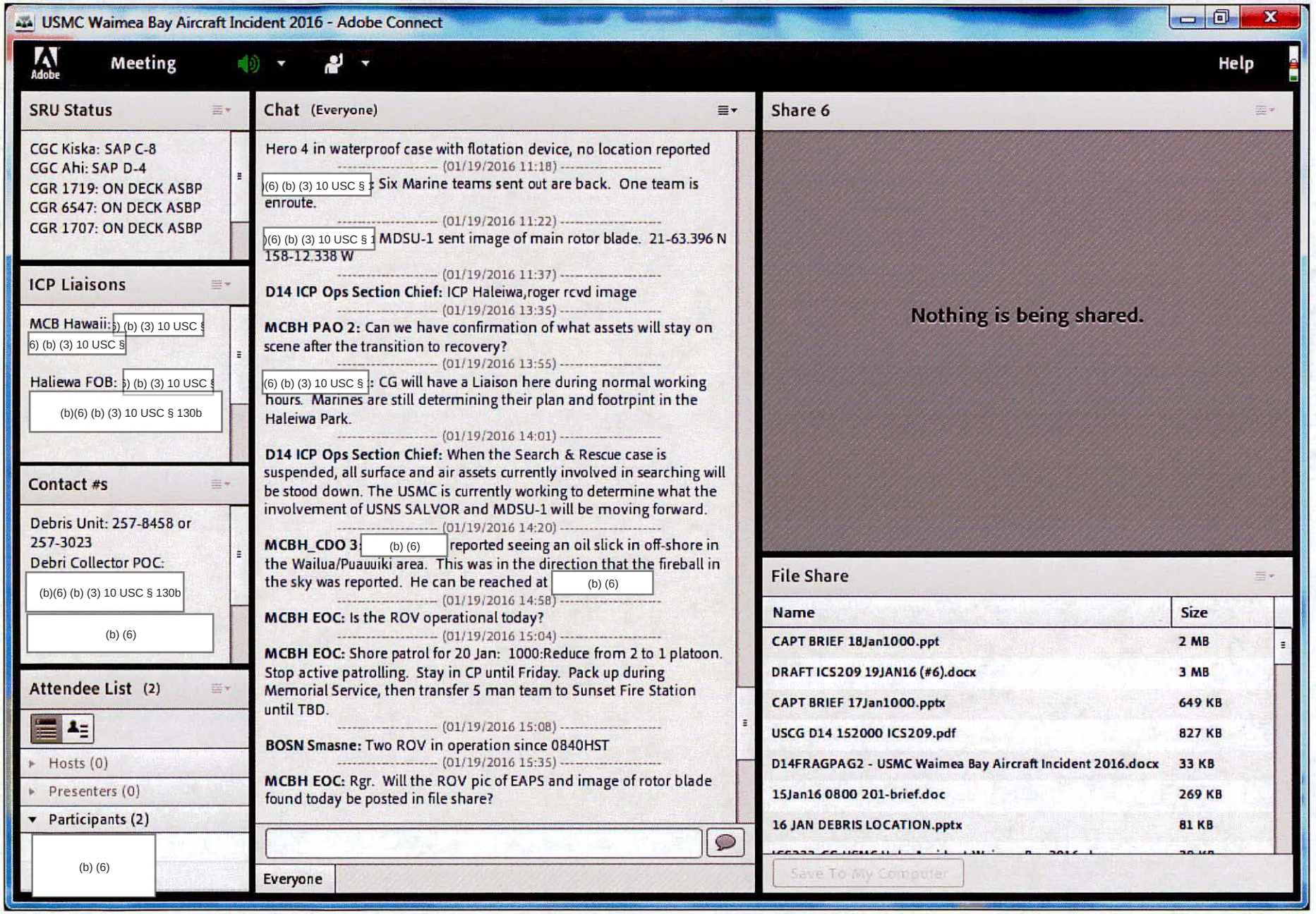
Golf as of 0600 17Jan16.JPG

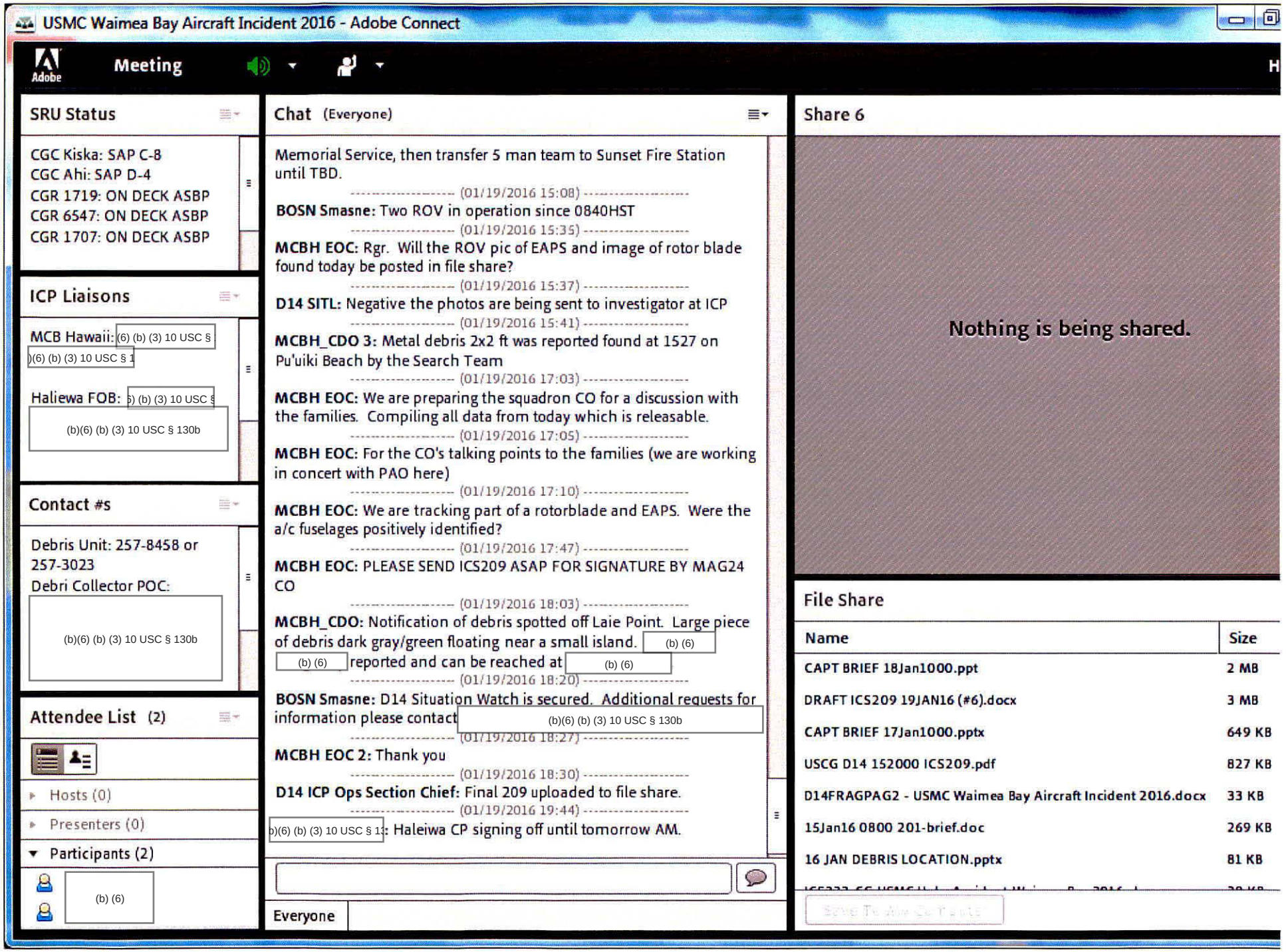
Full Screen



File Share

Name	Size
CAPT BRIEF 18Jan1000.ppt	2 MB
DRAFT ICS209 19JAN16 (#6).docx	3 MB
CAPT BRIEF 17Jan1000.pptx	649 KB
USCG D14 152000 ICS209.pdf	827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx	33 KB
15Jan16 0800 201-brief.doc	269 KB
16 JAN DEBRIS LOCATION.pptx	81 KB
ICS233-CG USMC Helo Accident Waimea Bay 2016.xls	39 KB


USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect
Meeting
Help
SRU Status
CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
ICP Liaisons
MCB Hawaii:
Haliewa FOB:
(b)(6) (b) (3) 10 USC § 130b
Contact #s
Debris Unit: 257-8458 or 257-3023
Debri Collector POC:
(b)(6) (b) (3) 10 USC § 130b
(b) (6)
Attendee List (2)
Hosts (0)
Presenters (0)
Participants (2)
(b) (6)
Chat (Everyone)
Hero 4 in waterproof case with flotation device, no location reported
(01/19/2016 11:18)
(6) (b) (3) 10 USC § : Six Marine teams sent out are back. One team is enroute.
(01/19/2016 11:22)
(6) (b) (3) 10 USC § : MDSU-1 sent image of main rotor blade. 21-63.396 N 158-12.338 W
(01/19/2016 11:37)
D14 ICP Ops Section Chief: ICP Haleiwa,roger rcvd image
(01/19/2016 13:35)
MCBH PAO 2: Can we have confirmation of what assets will stay on scene after the transition to recovery?
(01/19/2016 13:55)
(6) (b) (3) 10 USC § : CG will have a Liaison here during normal working hours. Marines are still determining their plan and footrpint in the Haleiwa Park.
(01/19/2016 14:01)
D14 ICP Ops Section Chief: When the Search & Rescue case is suspended, all surface and air assets currently involved in searching will be stood down. The USMC is currently working to determine what the involvement of USNS SALVOR and MDSU-1 will be moving forward.
(01/19/2016 14:20)
MCBH_CDO 3: (b) (6) reported seeing an oil slick in off-shore in the Wailua/Puauuiki area. This was in the direction that the fireball in the sky was reported. He can be reached at (b) (6)
(01/19/2016 14:58)
MCBH EOC: Is the ROV operational today?
(01/19/2016 15:04)
MCBH EOC: Shore patrol for 20 Jan: 1000:Reduce from 2 to 1 platoon. Stop active patrolling. Stay in CP until Friday. Pack up during Memorial Service, then transfer 5 man team to Sunset Fire Station until TBD.
(01/19/2016 15:08)
BOSN Smasne: Two ROV in operation since 0840HST
(01/19/2016 15:35)
MCBH EOC: Rgr. Will the ROV pic of EAPS and image of rotor blade found today be posted in file share?
Everyone
Share 6
Nothing is being shared.
File Share
Name
Size
CAPT BRIEF 18Jan1000.ppt 2 MB
DRAFT ICS209 19JAN16 (#6).docx 3 MB
CAPT BRIEF 17Jan1000.pptx 649 KB
USCG D14 152000 ICS209.pdf 827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx 33 KB
15Jan16 0800 201-brief.doc 269 KB
16 JAN DEBRIS LOCATION.pptx 81 KB
Save To My Computer


USMC Waimea Bay Aircraft Incident 2016 - Adobe Connect
Meeting
SRU Status
CGC Kiska: SAP C-8
CGC Ahi: SAP D-4
CGR 1719: ON DECK ASBP
CGR 6547: ON DECK ASBP
CGR 1707: ON DECK ASBP
ICP Liaisons
MCB Hawaii: (6) (b) (3) 10 USC §
)(6) (b) (3) 10 USC § 1
Haliewa FOB: 5) (b) (3) 10 USC §
(b)(6) (b) (3) 10 USC § 130b
Contact #s
Debris Unit: 257-8458 or 257-3023
Debri Collector POC:
(b)(6) (b) (3) 10 USC § 130b
Attendee List (2)
Hosts (0)
Presenters (0)
Participants (2)
(b) (6)
Chat (Everyone)
Memorial Service, then transfer 5 man team to Sunset Fire Station until TBD.
(01/19/2016 15:08)
BOSN Smasne: Two ROV in operation since 0840HST
(01/19/2016 15:35)
MCBH EOC: Rgr. Will the ROV pic of EAPS and image of rotor blade found today be posted in file share?
(01/19/2016 15:37)
D14 SITL: Negative the photos are being sent to investigator at ICP
(01/19/2016 15:41)
MCBH_CDO 3: Metal debris 2x2 ft was reported found at 1527 on Pu'uiki Beach by the Search Team
(01/19/2016 17:03)
MCBH EOC: We are preparing the squadron CO for a discussion with the families. Compiling all data from today which is releasable.
(01/19/2016 17:05)
MCBH EOC: For the CO's talking points to the families (we are working in concert with PAO here)
(01/19/2016 17:10)
MCBH EOC: We are tracking part of a rotorblade and EAPS. Were the a/c fuselages positively identified?
(01/19/2016 17:47)
MCBH EOC: PLEASE SEND ICS209 ASAP FOR SIGNATURE BY MAG24 CO
(01/19/2016 18:03)
MCBH_CDO: Notification of debris spotted off Laie Point. Large piece of debris dark gray/green floating near a small island. (b) (6)
(b) (6) reported and can be reached at (b) (6)
(01/19/2016 18:20)
BOSN Smasne: D14 Situation Watch is secured. Additional requests for information please contact (b)(6) (b) (3) 10 USC § 130b
(01/19/2016 18:27)
MCBH EOC 2: Thank you
(01/19/2016 18:30)
D14 ICP Ops Section Chief: Final 209 uploaded to file share.
(01/19/2016 19:44)
b)(6) (b) (3) 10 USC § 1: Haleiwa CP signing off until tomorrow AM.
Everyone
Share 6
Nothing is being shared.
File Share
Name
Size
CAPT BRIEF 18Jan1000.ppt 2 MB
DRAFT ICS209 19JAN16 (#6).docx 3 MB
CAPT BRIEF 17Jan1000.pptx 649 KB
USCG D14 152000 ICS209.pdf 827 KB
D14FRAGPAG2 - USMC Waimea Bay Aircraft Incident 2016.docx 33 KB
15Jan16 0800 201-brief.doc 269 KB
16 JAN DEBRIS LOCATION.pptx 81 KB

Incident Name,
Navy Helicopter Accident
Off Haleiwa Harbor, Jan. 15, 2016
1300 PST

(b) (6)

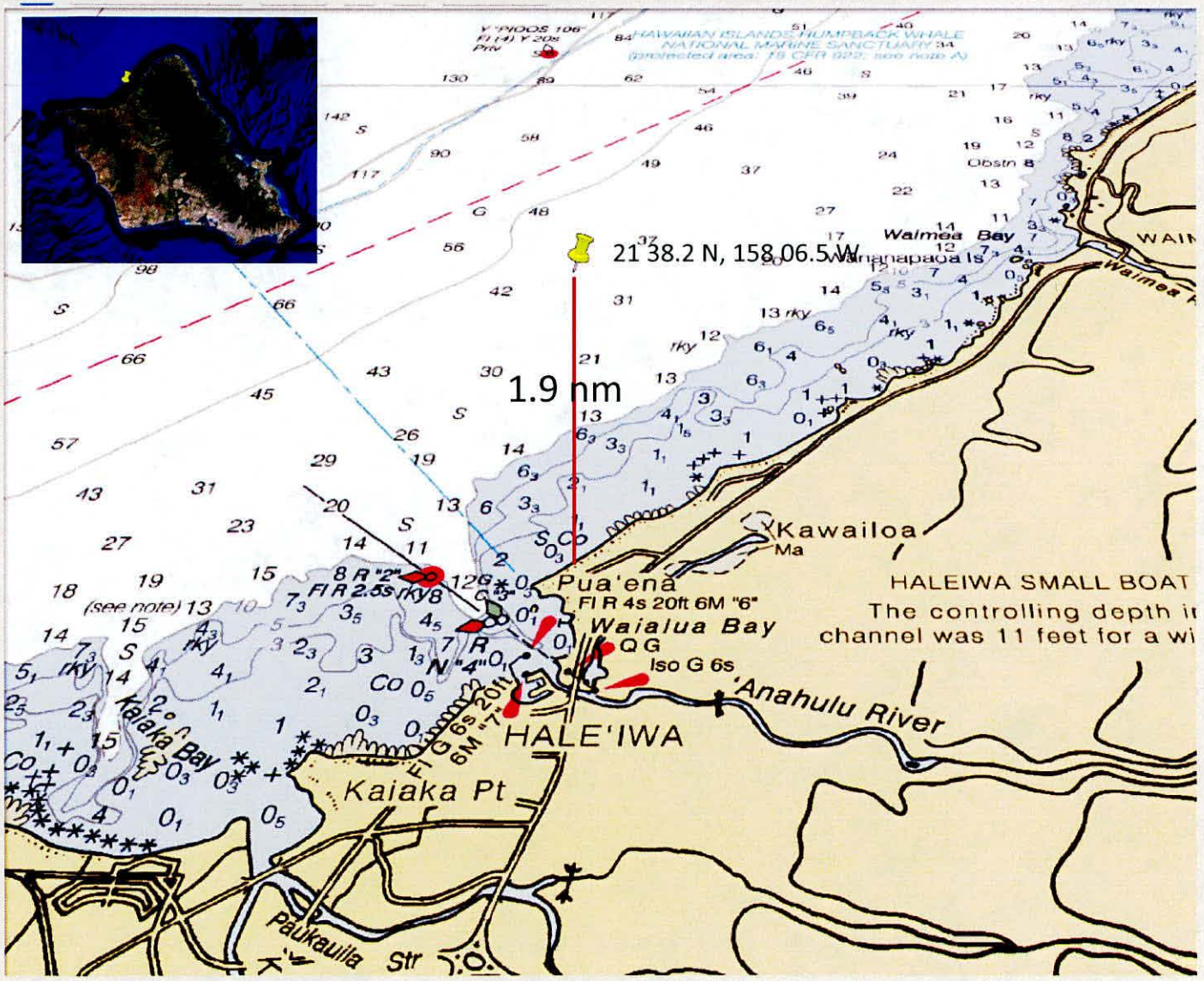
ENCLOSURE (18)

Incident information

- **JP-5 spill:**
  - Thursday, Jan 14, 2016 at about 2330 HST CG received a call about 2 downed military helicopter off the N. Shore of Oahu
  - Location is reported to be LAT: 21 38.2 N, LONG: 158 06.5 W
  - The two aircraft was estimated to have up to 4,000 gallons total of JP-8 onboard.

- **Current status:**
  - Search and Rescue efforts on-going
  - Debris field reported

MAP


21 38.2 N, 158 06.5 W
1.9 nm
Walmea Bay
Kawailoa
Pua'ena
Fl R 4s 20ft 6M "6"
Waialua Bay
Q G
Iso G 6s
'Anahulu River
HALE'IWA
Kaiaka Pt
Kaiaka Bay
Paukauila Str
HALEIWA SMALL BOAT
The controlling depth i
channel was 11 feet for a wi

Wind Data

Weather Conditions for KKRH1

Time (HST)	2.0m Temperature °F	2.0m Dew Point °F	2.0m Wet bulb temperature °F	2.0m Relative Humidity %	6.1m Wind Speed mph	6.1m Wind Gust mph	6.1m Wind Direction
9:36	67.0	65.8	66.3	96	16.0	26.0	N
8:36	68.0	66.8	67.3	96	4.0	13.0	N
7:36	68.0	66.5	67.1	95	3.0	9.0	SSW
6:36	68.0	66.8	67.3	96	5.0	9.0	NE
5:36	68.0	66.5	67.1	95	6.0	14.0	NNE
4:36	68.0	66.5	67.1	95	10.0	20.0	N
3:36	70.0	65.9	67.3	87	16.0	22.0	N
2:36	70.0	65.6	67.0	86	6.0	9.0	NNE
1:36	70.0	65.3	66.8	85	6.0	10.0	NNE
0:36	70.0	64.9	66.6	84	5.0	9.0	N
23:36	71.0	65.9	67.5	84	4.0	17.0	NNE
22:36	71.0	65.9	67.5	84	5.0	10.0	SSW

Wind Station off Kaena Pt shows winds primarily In the 4 – 6 knots range from the N to NNE

http://mesowest.utah.edu/cgi-bin/droman/mesomap.cgi?state=HI&rawsflag=3

Wave Data

MM	DD	TIME (HAST)	WDIR	WSPD kts	GST kts	WVHT ft	DPD sec	APD sec	MWD F
01	15	8:34 am	-	-	-	14.8	18	13.0	NW
01	15	8:04 am	-	-	-	14.4	15	12.8	NW
01	15	7:34 am	-	-	-	12.8	14	12.7	NW
01	15	7:04 am	-	-	-	12.5	15	12.6	NW
01	15	6:34 am	-	-	-	10.2	15	11.4	NNW
01	15	6:04 am	-	-	-	9.8	14	10.8	NNW
01	15	5:34 am	-	-	-	10.2	15	10.9	NW
01	15	5:04 am	-	-	-	9.5	15	10.5	NW
01	15	4:34 am	-	-	-	9.5	15	10.7	NNW
01	15	4:04 am	-	-	-	8.9	15	10.5	NW
01	15	3:34 am	-	-	-	8.2	17	10.6	NNW
01	15	3:04 am	-	-	-	8.2	15	10.2	NW
01	15	2:34 am	-	-	-	7.9	15	10.3	NNW
01	15	2:04 am	-	-	-	7.2	15	9.5	NNW
01	15	1:34 am	-	-	-	7.2	15	9.7	NW
01	15	1:04 am	-	-	-	7.2	15	9.6	NW
01	15	12:34 am	-	-	-	6.9	11	9.2	NNW
01	15	12:04 am	-	-	-	7.9	17	10.0	NNW
01	14	11:34 pm	-	-	-	7.5	14	9.8	NNW
01	14	11:04 pm	-	-	-	6.9	11	9.6	NNW
01	14	10:34 pm	-	-	-	7.2	17	9.8	NNW
01	14	10:04 pm	-	-	-	7.5	10	9.6	NNW

Station 51201 - Waimea Bay, HI (106)



http://www.ndbc.noaa.gov/station_page.php?station=5120

NWS Spot Forecast

Today	NE wind 11 to 17 kt. Scattered showers. NW swell 17 ft at 17 seconds. Waves 16 to 18 ft.
Tonight	Variable winds 5 kt or less. Isolated showers. NW swell 14 to 16 ft at 16 seconds. Waves 14 to 16 ft.
Saturday	WNW wind around 6 kt. Isolated showers before noon. NW swell 12 to 13 ft at 15 seconds. Waves 14 ft subsiding to 11 ft.
Saturday Night	Variable winds 5 kt or less. Mostly clear. NW swell 11 ft. Waves around 11 ft.
Sunday	Variable winds 5 kt or less. Sunny. NW swell 9 to 10 ft. Waves 9 to 11 ft.
Sunday Night	Variable winds 5 kt or less. Mostly clear. NNW swell 8 to 9 ft. Waves 8 to 9 ft.
M.L.King Day	Variable winds 5 kt or less. Sunny. NNW swell 7 to 8 ft. Waves around 8 ft.
Monday Night	Variable winds 5 kt or less. Mostly clear. NNW swell 7 ft. Waves 7 to 8 ft.
Tuesday	NNW wind around 6 kt. Isolated showers. NNW swell 8 ft. Waves around 8 ft.



Station 51201 - Waimea Bay, HI (106)



http://www.ndbc.noaa.gov/station_page.php?station=5120

Estimated Fate of 4,000 Gallons of JP- 8

Under the 5 – 10 knot winds of last night and the 7 – 9 foot combined seas, it is estimated that 90% of the 4,000 gallons of fuel would be evaporated and naturally dispersed within 4 – 8 hours from being released.

Note that as of 1200 HST the winds and seas have increased so any release under the current conditions will results in a shorter persistence time than last night.

Trajectory Forecast for Friday (Jan 14th)

No noticeable shoreline impacts anticipated.

Any fuel that was lost last night would have resulted in scattered sheens that would have moved toward the shore a S to SW direction. Any sheen that persisted for more than about 5 -6 hours could have reached the outer surf zone. However with the large surf (up to 35-40 ft) on the North Shore naturally dispersing the sheen we would not expect any noticeable shoreline impacts.

It is possible that people along the shoreline would have smelled the evaporated fuel last night and this morning. We would expect floating debris to also come ashore this morning S-SW of the accident site.

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

Performance Reported On:

2. Occasion and Period Covered:

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

2. Occasion and Period Covered:

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (2)

CH-53E Current Readiness Team

Sep-15

UNIT	ASN	IR	OOR	FLE	AVPLAN RBA REQ	RBA	AVPLAN RBA REQ %	RBA TREND	NMCM	NMCM %	NMCM TREND	NMCS	NMCS %	NMCS TREND	Total NMC	MCNRBA
HMH-361	15.00	8.05	6.95	12.00	8.00	4.95	61.88%		1.50	18.63%		0.70	8.70%		2.20	0.90
HMH-366	15.00	9.65	5.35	12.00	8.00	4.05	50.63%		2.25	23.32%		2.75	28.50%		5.00	0.60
HMH-461	11.00	8.15	2.85	8.00	5.50	3.50	63.64%		1.35	16.56%		1.95	23.93%		3.30	1.35
HMH-461 Det B	4.00	4.00	0.00	4.00	2.50	2.10	84.00%		0.43	10.75%		1.24	31.00%		1.67	0.23
HMM-462	8.00	6.00	2.00	8.00	5.50	2.70	49.09%		0.65	10.83%		2.20	36.67%		2.85	0.45
VMM-265	4.00	3.95	0.05	4.00	2.50	2.00	80.00%		0.55	13.92%		1.25	31.65%		1.80	0.15
HMH-463	11.00	6.00	5.00	8.00	5.50	0.90	16.36%		1.95	32.50%		1.95	32.50%		3.90	1.20
HMH-463 Det A	4.00	2.60	1.40	4.00	2.50	2.08	83.20%		0.30	11.54%		0.15	5.77%		0.45	0.07
HMH-464	11.00	7.65	3.35	8.00	5.50	4.60	83.64%		0.90	11.76%		1.10	14.38%		2.00	1.05
VMM-162	4.00	3.25	0.75	4.00	2.50	1.40	56.00%		0.35	10.77%		0.95	29.23%		1.30	0.55
HMH-465	15.00	10.30	4.70	8.00	5.50	3.65	66.36%		1.25	12.14%		4.20	40.78%		5.45	1.20
VMM-161	4.00	4.00	0.00	4.00	2.50	1.88	75.20%		0.32	8.00%		1.64	41.00%		1.96	0.16
HMH-466	13.00	6.20	6.80	8.00	5.50	2.00	36.36%		1.00	16.13%		2.50	40.32%		3.50	0.70
VMM-166	4.00	4.00	0.00	4.00	2.50	1.80	72.00%		0.85	21.25%		0.95	23.75%		1.80	0.40
HMH-772	6.00	4.37	1.63	5.00	3.00	1.58	52.67%		0.16	3.66%		1.25	28.60%		1.41	0.16
Non-Deployed	105.00	67.62	37.38	77.00	51.50	28.43	55.20%		11.56	17.10%		18.30	27.06%		29.86	8.11
Deployed	24.00	20.55	3.45	24.00	15.50	10.76	69.42%		2.25	10.95%		6.48	31.53%		8.73	1.06
FRS	17.00	11.45	5.55	13.00	8.00	5.55	69.42%		2.25	19.65%		1.80	15.72%		4.05	1.85
TAC	129.00	88.17	40.83	101.00	67.00	39.19	58.49%		13.81	15.66%		24.78	28.10%		38.59	9.17
ALL	146.00	99.62	46.38	114.00	75.00	44.74	59.66%		16.06	16.12%		26.58	26.68%		42.64	11.02

RBA %	< 80%	80 - 99.99%	≥ 100%
NMCS %	> 24%	18 - 24%	< 18%
NMCM %	> 12%	9 - 12%	< 9%

Trend: Improved / Worsened

ENCLOSURE (160)

HMH-463 Readiness - COB Fri (JST)

- HMH-463 (CH-53E): 2 Of 10 MC / 1 RBA
- 061 -- 1 A/C MC/NRBA (Hawaii) FCF Post Phase, EFD 14 Oct **Flew FCF Today, Will Continue Tomorrow**
- - 4 A/C NMCM
- 786 -- (Hawaii) IW C-17 Rebuild, ECD 16 Oct
- 255 -- (Hawaii) IW Engine Low Power (Tool Shipping From MALS-36), ECD 20 Oct
- 265 -- (Hawaii) IW C-17 Build-up, ECD 16 Oct **Will Be Ready For FCF Tomorrow**
- 365 -- (Hawaii) IW Airspeed Indication, ECD 15 Oct
- - 4 A/C NMCS
- 990 -- (Hawaii) 1 Part (EAPS) EDD TBD
- 005 -- (Hawaii) 1 Part (Washer), EDD 19 Oct
- 994 -- (Hawaii) 1 Part (AFCS Controller) EDD 20 Oct
- 540 -- (Hawaii) 1 Part (Tubing) Shipping, 7 Parts Backordered EDD TBD
- - 5 A/C OOR
- 539 -- (Hawaii) IMC (KAL) ECD 14 Apr
- 261 -- (Hawaii) P&E Transition Crack, ECD 9 Oct
- 532 -- (Hawaii) Post MRF-D Build, ECD TBD
- 542 -- (Hawaii) MOD (AFB-345), ECD TBD
- 072 -- (Hawaii) P&E Belly Puncture, ECD 16 Oct

HMH-463 Readiness - COB Fri (HST)

- HMH-463 (CH-53E): 2 Of 10 MC / 1 RBA
- 540 -- 1 A/C MC/NRBA (Hawaii) FCF Pylon Replacement, EFD 30 Oct
- - 5 A/C NMCM
- 258 -- (Hawaii) IW Engine Start Pump, ECD TBD
- 786 -- (Hawaii) IW C-17 Rebuild, ECD 23 Oct
- 005 -- (Hawaii) IW Mod Restore, ECD 23 Oct
- 265 -- (Hawaii) IW C-17 Build-up, ECD 23 Oct
- 365 -- (Hawaii) IW Airspeed Indication, ECD 22 Oct
- - 3 A/C NMCS
- 990 -- (Hawaii) 1 Part (EAPS) EDD 23 Oct
- 255 -- (Hawaii) 1 Part (Hook) EDD 21 Oct (Possibly a PMC Discrepancy)
- 994 -- (Hawaii) 1 Part (Clamp) EDD 23 Oct
- - 5 A/C OOR
- 539 -- (Hawaii) IMC (KAL) ECD 14 Apr 2016
- 261 -- (Hawaii) P&E Transition Crack, ECD 04 Nov
- 532 -- (Hawaii) Post MRF-D Build, ECD TBD
- 542 -- (Hawaii) MOD (AFB-345), ECD TBD
- 072 -- (Hawaii) P&E Belly Puncture, ECD 23 Oct

HMH-463 LTD Acft

- 990 -- (CH-53E) HMH-463, 409 DLF: NMCS, EFD 23 Oct
- 540 -- (CH-53E) HMH-463, 346 DLF: NMCS, EFD 30 Oct
- 994 -- (CH-53E) HMH-463, 95 DLF: NMCS, EFD 23 Oct
- 005 -- (CH-53E) HMH-463, 68 DLF:NMCM, EFD 23 Oct

HMH-463 Maintainer Core Competencies

Qualifications	Req	O/H
SAFE FOR FLIGHT	5	6
QAR	5	6
CDQAR	9	11
CDI	17	22
QASO	4	5
PC	24	39

Support Equipment	Req	O/H
EXP CRANE	3	4
CC Cart	8	33
NAN Cart	8	57
HYD PWR	8	30
MEPP	12	63
LT CART	9	27
TUG	15	90
POP Bottle	6	40
Air Compressor	9	39
PWR Wash	11	40
Tow Qual	12	40
Pre Heater	8	13

: meets or exceeds requirement

: 50% ~ 99% of requirements

: < 50% of requirement

HMH-463 Manpower

MOS	O/H	S/G	E3 & ↓		E4		E5		E6		E7		E8		E9	
			O/H	S/G	O/H	S/G	O/H	S/G	O/H	S/G	O/H	S/G	O/H	S/G	O/H	S/G
6019	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0
6042	2	2	0	1	2	1	0	0	0	0	0	0	0	0	0	0
6046	15	15	4	6	7	4	2	3	1	1	1	1	0	0	0	0
6048	11	10	2	3	5	4	3	2	0	0	1	1	0	0	0	0
6072/73	2	5	1	5	1	0	0	0	0	0	0	0	0	0	0	0
6113	55	61	27	31	12	11	10	11	2	6	4	2	0	0	0	0
6153	58	61	29	27	16	18	7	9	5	5	1	2	0	0	0	0
6173	28	22	5	5	12	6	8	8	2	2	1	1	0	0	0	0
6323	49	51	18	21	21	15	5	8	3	5	2	2	0	0	0	0
6391	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0
6531	8	8	2	2	3	3	2	1	1	2	0	0	0	0	0	0
TOTAL	230	237	88	101	79	62	37	42	14	21	10	9	2	2	0	0

: > or = 97% of S/G

: < 97% of S/G

HMH-463
SNCO Qualification

RANK	ON HAND	BILLET/QUALIFICATION	NOTES
GYSGT	8	5	63%
SSGT	13	9	69%

- 3 GySgts projected to attain/re-attain CDI/CDQAR by the end of November.
- 3 SSgts expected to attain/re-attain CDI/CDQAR by the end of November

Sources: 1MAW O/H Report
ASM

HMH-463 Other Info

- New MMCO – (b)(6) (b) (3) 10 USC § 130b
- New TD Coordinator - SSgt
- Acft "Comers" by the end of the week
- MRF-D acft already close to FCF (75% & 95%)
- Marines crawling all over acft in hangar
- Hawaii (K-bay) Airshow
- MAG Training/Standdown (Monday HST)
- MRF-D Reintegration of Manpower/Assets

Give them until the end of the week or early next week to see an upswing in aircraft readiness.

(b)(3) 10 USC 130b; (b)(6)

(b) (5), (b)(2)

(b) (5), (b)(2)

(b) (5), (b)(2)

(b) (5), (b)(2)

(b) (5), (b)(2)

(b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b) (6)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

(b)(6) (b) (3) 10 USC § 130b, (b) (5)

UNITED STATES MARINE CORPS
1ST MARINE AIRCRAFT WING
UNIT 37101
FPO AP 96603-7101

IN REPLY REFER TO:
4790
AMI/MCI
3 SEP 15

From: ALMAT Officer, 1st Marine Aircraft Wing
To: Commanding Officer, Marine Heavy Helicopter Squadron 463
Via: Commanding Officer, Marine Aircraft Group 24

Subj: AIRCRAFT MAINTENANCE INSPECTION/MATERIAL CONDITION INSPECTION RESULTS

Ref: (a) COMNAVAIRFORINST 4790.2B CH-1
(b) WgBul 5040.2

- Sqdn CO meeting on SAT
-

Encl: (1) Aviation Maintenance Inspection Overview
(2) Program Grade Sheet
(3) Drills and Practicals
(4) MCI Report

1. In accordance with the references, the 1st Marine Aircraft Wing (MAW) Aviation Logistics Management and Training (ALMAT) team conducted an Aviation Maintenance Inspection (AMI) of Marine Heavy Helicopter Squadron 463 (HMH-463) during 31 August - 4 September 2015.

2. The 1st MAW ALMAT team inspected 39 NAMP programs for compliance with governing directives: 17 programs are graded as "On-Track", four programs are graded as "Needs More Attention", and 18 programs are graded as "Off-Track". A comprehensive list of discrepancies has been provided to the Maintenance Department.

3. The overall grades for HMH-463 are:

a. Maintenance Department: UNSAT

b. Support Equipment MCI: SAT

c. Aviation Life Support Systems (ALSS) MCI: UNSAT

d. Aircraft MCI: UNSAT

- "smugness" from SNCO
- poor Maintenance culture
- Did not prepare for inspection
- Hold people accountable
- No energy
- Worked 3x saturdays for WTI but not for getting ready for inspection
-

4. Command attention is required in the following deficient areas:

a. Off-Track Programs:

(1) Quality Assurance Audit
(2) Tool Control
(3) Corrosion Prevention and Control
(4) Plane Captain Qualification
(5) Egress/Explosives System Check Out
(6) SE Operator Training and Licensing
(7) SE Planned Maintenance Systems
(8) Central Technical Publications Library
(9) Technical Directive Compliance - Bad paper/Fired
(10) Maintenance Control
(11) Logs and Records
(12) Data Analysis
(13) Material Control

(b)(6), (b)(3) MALS 2H CO

- Work hours? 0700-0100
- APB 345/346, AQUIS FEB-MARCH
- LAVA VIPER - JAN
- MRF-D chops APRIL
- MALS Pre-Inspection MAY 4x OFFTRACK, none SOF
- Summer Turnover of Most SNCO's this Summer
- Complacency

ENCLOSURE (63)

(14) Aircraft Maintenance Material Readiness List
(15) Taxi/Turn Up/APU Licensing
(16) Explosive Handling Personnel Qualification and Certification
(17) Aviation Life Support System
(18) Support Equipment Misuse/Abuse

b. Needs More Attention Programs:

(1) Hydraulic Contamination Control
(2) Naval Aviation Metrology and Calibration
(3) Phase Maintenance
(4) Laser Hazard Safety

5. In conjunction with the MPA/MCI, 66 contingency response drills and practical proficiency examinations were conducted: 60 are graded as "Satisfactory" and six are graded as "Unsatisfactory".

6. Command attention is required in the following deficient areas:

a. Unsatisfactory Drills/Practical Applications:

(1) NALCOMIS Contingency
(2) AMSRR Verification
(3) CSEC Verification
(4) Pre-Op NAN4
(5) Pre-Op PMU72
(6) Work Center Work Load Report Validation

7. Program managers and personnel who merit special mention for the high quality of their performance during the inspection:

b)(6) (b) (3) 10 USC § 1

HAZMAT Material Spill
HAZWASTE Disposal
Respirator Check in/Check Out Procedures
MSDS Locating
HAZMAT Acceptance
Pre-Op Tire Inflator

8. The points of contact for further assistance are (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

Copy to:

CO, MAG-24
CO, HMH-463
AMO, HMH-463
QA, HMH-463
ALMAT Inspection Files

HMH-463 Information Package

Inspection Data/Percentages

Event	Date	Overall Grade	Off Track	NMA
1MAW AMI	20150903	53.6%	1. QA Audit 2. Tool Control 3. Corrosion Prevention 4. Plane Captain 5. Egress/Expl. Sys Checkout 6. SE Operator Training & Lic. 7. SEPMS 8. CTPL 9. TD Compliance 10. Maintenance Control 11. Logs and Records 12. Data Analysis 13. Material Control 14. AMMRL 15. Taxi/Turn/APU Licensing 16. Explosive Handling 17. ALSS 18. SE Misuse and Abuse	1. Hydraulic Contamination 2. Metrology / Calibration 3. Phase Maintenance 4. Laser Hazard Safety
CNAF	20141106	96%	1. Plane Captain Qualification 2. TD Compliance	1. NAMDRP 2. AMMRL 3. Compass Calibration
1MAW MPA	20140912	N/A (But if graded would have been a 65.3%)	1. Confined Space Entry 2. FOD Prevention 3. Tool Control 4. Corrosion Prevention 5. HAZMAT 6. TD Compliance 7. Phase Maintenance 8. Data Analysis 9. Battery Maintenance Safety 10. ALSS	1. Hydraulic Contamination 2. QA Audit 3. Egress/Explosive Sys Checkout 4. Acft Rec & Reports / Eng Acct. 5. Logs and Records 6. Material Control 7. Aircraft Armament Equipment
1MAW AMI	20130621	87.5%	1. Egress/Explosive Sys Checkout 2. CTPL 3. Phase Maintenance	1. Navy Oil Analysis 2. NAMDRP 3. Confined Space Entry 4. Maintenance Control
1MAW MPA	20120817	N/A (But if graded would have been a 92.5%)	1. Naval Aviation METCAL 2. AMMRL	1. Tool Control 2. SE Misuse & Abuse

WING/MALS - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 3RD QTR CY 2015
09/10/2015

Discrepancy Report, File Copy, Overview
1MAW
20150831-20150904 HMH-463 AMI

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Needs More Attention (NMA)" - Hydraulic Contamination Control (600)

This program is graded as "NMA" due to the following reason:

- Hydraulic Contamination Control Program Monitor in not certified.

- Hydraulic Contamination QCL worksheets are not completed correctly or documenting required reading.

- SE Miscellaneous History Records do not reflect Squadrons acceptance hydraulic samples.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Needs More Attention (NMA)" - Naval Aviation Metrology and Calibration (METCAL)(2000)

This program was graded "NMA" due to the following reasons:

- Item found uncalibrated not on inventory and ready for issue.

- Multiple items not on inventory.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Needs More Attention (NMA)" - Phase Maintenance (3400)

This program is graded as "NMA" due to the following reason:

- SCCs are not reflecting multiple daily, or hourly completions, and hi-time component removal.

- SCCs are not documented with Technical Directives incorporated.

- SCCs are not documented with assigned/issued MRCs tasks in excess of two hours or reflect explanatory notes for tasks that cannot be completed.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Needs More Attention (NMA)" - Laser Hazard Control Program (4700).

This program is graded "NMA" due to the following reasons:

- The laser fire log is not being utilized for all lasing events.

- Previous audits did not identify on going program discrepancies.

- No Laser Safety Supervisor (LSS) has been designated by the Commanding Officer IAW squadron SOP.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Quality Assurance Audit Program (800)

This program is graded "Off-Track" due to the following reasons:

- QA is not effectively reviewing the qualifications of personnel nominated to become a CDI resulting in unqualified personnel signing off MAFs.

- QA review process of all incoming technical publications and directives is inefficient resulting in missed technical directives.

- The Quality Assurance department trend analysis process is ineffective resulting in an inability to identify discrepancy trends, specific problems and causal factors as they apply to aircraft maintenance and NAMP programs.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Tool Control (1300)

This program was graded "Off-Track" due to the following reasons:

- Replacement tools do not have an accurate inventory.

- Improper BOS/EOS inventories being conducted.

- Proper security and control is not maintained over tools. Multiple containers found unsecure.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Corrosion Prevention and Control (1400)

This program is graded "Off-Track" due to the following reason:

- Respirators are not reflecting monthly inspections, cleanings and cartridges replaces every thirty days.

- Multiple personnel found with expired or no medical surveillance evaluations "Isocyanates" within ASM.

- Bare metal, Corrosion Prevention and Treatments WO are not documented upon completion of scheduled or unscheduled special inspections.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Plane Captain Qualification (1500)

This program is graded as "Off-Track" due to the following reasons:

- OJT and Q/A practical exam were performed without trainee possessing all required qualifications.

- Semi-Annual monitors completed on expired plane captain.

- No CSEC 5700 Overview on file for semi-annual monitors performed.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Egress/Explosives System Checkout (1600)

This program was graded "Off-Track" due to the following reasons:

-Egress/Explosive System Checkout training is not effectively training individuals in the danger areas of the T/M/S.

- Multiple maintenance personnel have gaps in their Egress/Explosive Systems training of several months.

- Current method of verifying training is received for all non-squadron personnel is not effective or efficient.

Evaluator: (b)(6) (b) (3) 10 USC § 13

"Off-Track" - Support Equipment Operator Training and Licensing (1700)

This program is graded "Off-Track" due to the following reasons:

- Personnel who fail written exams during Initial Qualification are not receiving additional Phase II OJT before retesting.

- Support Equipment checkout log reflects personnel checking in/out SE without possessing a valid Support Equipment License for equipment.

- Support Equipment TEREX Crane License was renewed without passing all Phase II practical and written test requirements.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Support Equipment Planned Maintenance System (1800)

This program is graded "Off-Track" due to the following reasons:

- Personnel are not performing pre-operational inspections IAW applicable MIMs.

- Support Equipment overdue for PM was not identified or restricted from further operation until the completion of the subject inspection.

- Historical records and CM Auto Log sets are not established for all SE as required.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Central Technical Publications Library (1900)

This program is graded "Off-Track" due to the following reasons:

- No Stamps on IRACs and untracked publications.

- No supporting documentation for CTPL audits

- Missing required publications to effectively run CTPL.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track"- Technical Directive Compliance (2600)

This program is graded "Off-Track" due to the following reasons:

- No MCNs assigned to Urgent TDs

- Urgent TD's are not complied with and are passed compliance dates

- System reason blocks are not completed properly.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Maintenance Control Program (2900)

This program is graded "Off-Track" due to the following reasons:

- Maintenance Control did not effectively control ALSS maintenance resulting in several pieces of aircraft gear missing required inspections.

- The TD coordinator is not effectively coordinating with the Program Manager to schedule incorporation of TDs within in the compliance timeframe.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Logs and Records (3300)

This program is graded "Off-Track" due to the following reasons:

- Flight equipment assets are not being properly tracked in OOMA.

- Depot level TDs are not properly annotated on the CM ALS Misc History.

- IBIS 182 Day wipe test not annotated properly on the Repair/Rework.

- TRDS bearing S/N not annotated properly on the Repair/Rework.

- All pertinent information needs to match on both SRC and CM/ALS.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Data Analysis (3600)

This program was graded "Off-Track" due to the following reasons:

- Over 20% of sampled MAF/WO had incorrect documentation.

- Database integrity and validity are not maintained at 100%.

- Maint-6 reports are not properly being managed.

Evaluator: (6) (b) (3) 10 USC §

"Off-Track" - Material Control (3700)

This program was graded "Off-Track" for the following reasons:

- Proper accountability and control of components/material requisitions not maintained.

- Unauthorized and unaccounted for PEB and repairable components discovered in building 166.

- Material requisitions not updated with proper Project Codes to reflect aircraft reporting status or updated document statuses.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Aircraft Maintenance Material Readiness List (AMMRL)(3800).

This program is graded "Off-Track" due to the following reasons:

- The IMRL Asset Manager does not review and reconcile the IMRL with the Work Center Supervisors to ensure IMRL Revision Requests are submitted as required.

- Appropriate action is not being taken for all NRFI IMRL SE by the IMRL asset Manager.

- Deficit IMRL assets are not being reviewed and reconciled by the IMRL asset manager for appropriate corrective action.

Evaluator: (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Taxi/Turnup/APU Licensing (4000)

This program is graded "Off-Track" due to the following reason:

- Multiple Marines did not re-qualify correctly.

Evaluator: (b)(6) (b) (3) 10 USC § 13

"Off-Track" - Explosives Handling Personnel Qualification and Certification (4900)

This program is graded "Off-Track" due to the following reasons:

- On the job training documented for personel who do not possess an AA&E screening and Qual/Cert.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Aviation Live Support System (ALSS) (5200)

This program was graded "Off-Track" due to the following reasons:

- Maintenance Control does not effectively manage/schedule ALSS inspections allowing multiple aircraft assets to remain in service months after reaching their high-time date.

- Work Center is not effectively managing their TD program by not having an applicable NAT 01, having excess TDs that do not apply to their T/M/S or survival assets and not being aware that they have access to DECKPLATE.

- Multiple survival items are illegally modified or not inspected IAW applicable references.

Evaluator: (b)(6) (b) (3) 10 USC § 130b

"Off-Track" - Support Equipment Misuse/ Abuse (5400)

This program is graded "Off-Track" due to the following reasons:

- Administrative filler was not added to report 14-002 as identified as the corrective action from previous CNAF audit.

- Report 15-002 has no record of being forwarded to the CO of the command with IMRL reporting responsibility for the item.

Pages 180 through 181 redacted for the following reasons:
- -
(b)(5)

UNCLAS FOR OFFICIAL USE ONLY
MOD 001 TO MARFORPAC REQUEST SALVAGE/RECOVERY SUPPORT

Originator: COMMARFORPAC G THREE
DTG: 011811Z Feb 16 Precedence: R DAC: General
To: COMPACFLT PEARL HARBOR HI, COMPACFLT PEARL HARBOR HI, COMNAVSAFECEN NORFOLK VA

CC: CNO WASHINGTON DC, COMNAVSEASYSCOM WASHINGTON DC, CMC SD WASHINGTON DC, CMC WASHINGTON DC, More...

RAAUZYUW RUJDAAA1477 0321816-UUUU--RUJDAAA.
ZNR UUUUU ZDH ZUI RUEOMCH5158 0321817
R 011811Z FEB 16
FM COMMARFORPAC G THREE
TO RUOIAAA/COMPACFLT PEARL HARBOR HI
RUOIBBB/COMPACFLT PEARL HARBOR HI
RUOIAAA/COMNAVSAFECEN NORFOLK VA
INFO RUOIAAA/CNO WASHINGTON DC
RUOIAAA/COMNAVSEASYSCOM WASHINGTON DC
RUJIAAA/CMC SD WASHINGTON DC
RUJIAAA/CMC WASHINGTON DC
RUOIBBB/USNS SALVOR
RUOIAAA/COMTHIRDFLT
RUJDAAA/COMMARFORPAC
RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC CMD OPS CNTR
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CG III MEF
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
RUJDAAA/MAG TWO FOUR
RUJDAAA/HMH FOUR SIX THREE
BT
UNCLAS FOR OFFICIAL USE ONLY
SUBJ/MOD 001 TO MARFORPAC REQUEST SALVAGE/RECOVERY SUPPORT
REF/A/DOC/CNO/13 MAY 14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/202146Z JAN 16//
REF/D/MSG/SECNAV WASHINGTON DC/161750Z MAR 98//
REF/E/MSG/MARFORPAC 210135ZJAN16//
NARR/REF A IS OPNAVINST 3750.6S, SUBJ: NAVAL AVIATION SAFETY MANAGEMENT SYSTEM. REF B IS OPNAVINST 4740.2G, SUBJ: SALVAGE AND RECOVERY PROGRAM. REF C IS MAG-24 SALVAGE REQUEST. REF D IS ALNAV020/98; SUBJ: DON SALVAGE POLICY. REF E IS ORIGINAL MARFORPAC REQUEST SALVAGE/RECOVERY SUPPORT//
POC/MARFORPAC WATCH OFFICER/MARFORPAC/TEL: 808-477-0077/DSN: 477-0077/EMAIL: MARFORPAC.COC.WO@USMC.MIL//
RMKS/1. WITH CONCURRENCE FROM AMB AND NAVAL SAFETY CENTER, MARFORPAC REQUESTS SALVAGE OF THE FOLLOWING AIRCRAFT PARTS LOCATED DEEPER THAN 300FSW AND ALL STAKEHOLDERS DEEM SALVAGE COSTS ARE JUSTIFIED TO SUPPORT THE AIRCRAFT MISHAP INVESTIGATION. AIRCRAFT PARTS AS FOLLOWS:
A.COCKPIT AREA
1)HUMAN REMAINS
2)NR 1/ NR 2 NOSE E-BAY
3)COMM/COMPUTERS/IMDS/AIR DATA COMPUTER/ GPS
4)CONTROL INPUT
5)ALL CONTROL/INSTRUMENT PAELS

ENCLOSURE (185)

6)ACCESSORY GEAR BOX AND ALL ATTACHMENTS
7)BROOM CLOSET
8)PILOT AND AIRCREW G SEATS
9)LANDING GEAR
B.GEAR BOXES/FLIGHT CONTROL INPUT
1)TAIL
2)MAIN GEARBOX
3)ENGINES/NOSE GEARBOX/DRIVE SHAFTS
4)ALL ROTOR BLADES
C.MISCELLANEOUS ITEMS
1)LANDING GEAR
2)FUSELAGE
3)CHARRING
4)PERSONAL ITEMS
D.HAZARDS
1)CADS
2)IBIS
3)FIRE BOTTLE
4)ICE DETECTION SYSTEM
5)PENCIL FLARES
6)IBIS SENSORS
7)HABD BOTTLE
8)APP ACCUMULATOR
2. POINTS OF CONTACT:
A. AVIATION MISHAP BOARD:

(b)(6) (b) (3) 10 USC § 130b

B. MARFORPAC:

(b)(6) (b) (3) 10 USC § 130b

(3) MARFORPAC COC WATCH OFFICER/COMM 808-477-0077/ EMAIL:
MARFORPAC.COC.WO@USMC.MIL
C. NAVAL SAFETY CENTER:

(b)(6) (b) (3) 10 USC § 130b

BT
#1477
4BA8

NNNN
Received from AUTODIN 011817Z Feb 16

UNCLAS FOUO
MARFORPAC DIVING-SALVAGE SERVICE REQUEST//

Originator: COMTHIRDFLT
DTG: 020058Z Feb 16 Precedence: O DAC: General
CC: COMMARFORPAC, COMMARFORPAC ALD, COMMARFORPAC G THREE, COMMARFORPAC SAFETY,
More...

OAAUZYUW RHOISTA7004 0330100-UUUU--RUJDAAA.
ZNR UUUUU
O 020058Z FEB 16
FM COMTHIRDFLT
TO ZEN/COMEODGRU ONE
ZEN/CTF 33
ZEN/COMNAVSURFGRU MIDPAC
INFO ZEN/CNO WASHINGTON DC
ZEN/CMC SD WASHINGTON DC
ZEN/CMC WASHINGTON DC
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMNECC LITTLE CREEK VA
ZEN/COMNECCPAC PEARL HARBOR HI
RUJDAAA/COMMARFORPAC
RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
ZEN/COMNAVSEASYSCOM WASHINGTON DC
ZEN/COMNAVSAFECEN NORFOLK VA
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CG III MEF
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
ZEN/COMEODGRU TWO
ZEN/USNS SALVOR
ZEN/MOBDIVSALU ONE
ZEN/EODMU ELEVEN
RUJDAAA/MAG TWO FOUR
RUJDAAA/HMH FOUR SIX THREE
ZEN/COMTHIRDFLT
BT
UNCLAS F O U O
MSGID/ORDER/COMTHIRDFLT/16-012/FEB/
SUBJ/MARFORPAC DIVING-SALVAGE SERVICE REQUEST//
REF/A/DOC/CNO/13 MAY 14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/202146Z JAN 16//
REF/D/MSG/SECNAV WASHINGTON DC/161750Z MAR 98//
REF/E/MSG/MARFORPAC/210135Z JAN 16//
REF/F/EMAIL/CPF/21 JAN 16//
REF/G/MSG/CPF/230910Z JAN 16//
REF/H/MSG/C3F/231701Z JAN 16//
REF/I/VOCO/C3F/28JAN16//
NARR/REF A IS OPNAVINST 3750.6S, NAVAL AVIATION SAFETY
MANAGEMENT SYSTEM. REF B
IS OPNAVINST 4740.2G, SALVAGE AND RECOVERY PROGRAM.
REF C IS MAG-24 SALVAGE
REQUEST. REF D IS ALNAV 020/98; DON SALVAGE POLICY.
REF E IS MARFORPAC REQUEST
FOR RAPID SALVAGE/RECOVERY ASSISTANCE. REF F IS COMPACFLT
VOCO TO COMMENCE

ENCLOSURE (185)

MOVEMENT OF C3F ASSETS. REF G IS COMPACFLT TASKORD TO
SUPPORT MARFORPAC SALVAGE
REQUEST. REF H IS C3F TASKORD 16-009 TO SUPPORT MARFORPAC
SALVAGE REQUEST. REF I
IS VOCO FROM C3F TO CTF-33 TO SUPPORT SALVAGE OPERATION
WITH USNS NAVAJO.//
ORDTYP/FRAGORD/001/COMTHIRDFLT//
TIMEZONE/Z//
RMKS/IAW REFS A THRU E AND PER REFS F THRU I, THIS IS C3F FRAGORD
001 TO C3F
TASKORD 16-009 DIRECTING CTF-33 TO SUPPORT EODGRU-1/MDSU-1 SEARCH
AND SALVAGE
OPERATIONS OF TWO USMC CH-53E AIRCRAFT IVO NORTH SHORE, OAHU, HI
AS SOON AS
POSSIBLE WITH USNS NAVAJO. THIS ORDER TERMINATES UPON COMPLETION
OF RECOVERY AND
REDPLOYMENT.//
GENTEXT/SITUATION/
1. SITUATION. AFTER ANALYSIS OF DATA COLLECTED FROM MDSU-1 THRU
VARIOUS SOURCES
IVO OF MISHAP AREA, THE DEPTH OF DEBRIS FROM CH-53 MISHAP HAS
BEEN ADJUSTED.
MAJORITY OF DEBRIS HAS BEEN LOCATED BEYOND 300FSW AND REQUIRE
ADDITIONAL NAVSEA
CAPABILITY TO RECOVER. SOME DEBRIS HAS BEEN DISCOVERED OR IS
IN THE PROCESS OF
BEING IDENTIFIED WITHIN THE OPERATIONAL LIMITS OF MDSU-1.//
GENTEXT/MISSION/
2. MISSION. NO CHANGE.//
GENTEXT/EXECUTION/
3. EXECUTION.
3.A. COMMANDERS INTENT. NO CHANGE.//
4. TASKS.
4.A. EODGRU-1. NO CHANGE.//
4.B. CTF-33.
4.B.1. NO CHANGE.
2.B.2. NO CHANGE.
2.B.3. SOURCE AND PROVIDE USNS NAVAJO (T-ATF) TO SUPPORT
EODGRU-1/MDSU-1 SALVAGE
EFFORTS FOR DURATION OF MISSION.
2.B.3.1. EMPLOYMENT DURING SALVAGE OPERATIONS IS DETERMINED BY
APPROVED SALVAGE
PLAN AND THE ON SCENE COMMANDER (OSC) FOR SALVAGE OPERATIONS
FOR BOTH NAV AND SAL.
4.C. COMNAVSURFGRUMIDPAC
4.C.1. NO CHANGE.
5. PLANNING GUIDANCE. NO CHANGE.//
6. COORDINATING INSTRUCTIONS.
6.A-G. NO CHANGES.
6.H. ICW CPF AND C3F, EODGRU-1 DIRLAUTH WITH NAVSEA OOC (SUPSALV)
PERSONNEL TO
DETERMINE EXTENT OF SUPPORT, IF ANY, WOULD BE REQUIRED FROM
EODGRU-1 ASSETS. KEEP
C3F POC INFORMED.
6.I. BPT ADJUST OSC IF/WHEN NAVSEA OOC (SUPSALV) DEPLOYS TO
OAHU, HI.//
7. PUBLIC AFFAIRS (PA). NO CHANGE.//
GENTEXT/ADMIN AND LOGISTICS/
8. NO CHANGE.
9. FUNDING. NO CHANGE.//
GENTEXT/COMMAND AND SIGNAL/
10. COMMAND RELATIONSHIPS. MARFORPAC IS THE CONTROLLING
CUSTODIAN FOR OPERATION

AND IS THE SUPPORTED COMPONENT COMMANDER. COMPACFLT IS THE SUPPORTING COMPONENT
COMMANDER, COMTHIRDFLT IS THE SUPPORTING OPERATIONAL COMMANDER, MOBILE DIVE AND
SALVAGE UNIT ONE IS THE ON SCENE COMMANDER FOR SALVAGE OPERATIONS.
11. POINTS OF CONTACT:
11.A. C3F:
11.A.1. FLEET WATCH OFFICER/COMM: 619-524-9534/
EMAIL: C3F_FWO.FCT(AT)NAVY.(SMIL.)MIL
11.A.2. (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

11.B. COMPACFLT:
11.B.1. BATTLE WATCH CAPTAIN/COMM: 808-474-5452/
EMAIL: CPF.CATBWC(AT)NAVY.(SMIL.)MIL

(b)(6) (b) (3) 10 USC § 130b

11.D. AVIATION MISHAP BOARD:

(b)(6) (b) (3) 10 USC § 130b

11.E. MARFORPAC:
11.E.1. (b)(6) (b) (3) 10 USC § 130b /AVIATION SAFETY OFFICER/COMM

(b)(6) (b) (3) 10 USC § 130b

EMAIL: (b)(6) (b) (3) 10 USC § 130b
11.E.3. MARFORPAC COC WATCH OFFICER/COMM 808-477-0077/ EMAIL:
MARFORPAC.COC.WO(AT)USMC.MIL
11.E.4. (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

11.F. NAVAL SAFETY CENTER:
11.F.1. (b)(6) (b) (3) 10 USC § 130b /AVIATION MISHAP INVESTIGATIONS
DEPARTMENT HEAD/

(b)(6) (b) (3) 10 USC § 130b

BT
#7004
646B

NNNN
Received from AUTODIN 020101Z Feb 16

UNCLAS FOR OFFICIAL USE ONLY
(U) COMPACFLT REQUEST FOR SUPSALV UNDERWATER RECOVERY SUPPORT//

Originator: COMPACFLT PEARL HARBOR HI
DTG: 020437Z Feb 16 Precedence: O DAC: General
CC: HQ USPACOM HONOLULU HI, COMMARFORPAC CMD OPS CNTR, COMMARFORPAC G THREE,
COMMARFORPAC SAFETY, More...

OAAUZYUW RUOIAAA7618 0330443-UUUU--RUJDAAA.
ZNR UUUUU
O 020437Z FEB 16
FM COMPACFLT PEARL HARBOR HI
TO ZEN/CNO WASHINGTON DC
INFO RUICAAA/HQ USPACOM HONOLULU HI
ZEN/COMTHIRDFLT
ZEN/COMUSFLTFORCOM NORFOLK VA
ZEN/COMNAVSEASYSCOM WASHINGTON DC
ZEN/COMNAVAIRPAC SAN DIEGO CA
ZEN/COMNAVAIRSYSCOM PATUXENT RIVER MD
ZEN/COMNAVREG PEARL HARBOR HI
ZEN/NAVFAC HAWAII PEARL HARBOR HI
ZEN/NAVFAC PACIFIC PEARL HARBOR HI
ZEN/COMNECC LITTLE CREEK VA
ZEN/COMNECCPAC PEARL HARBOR HI
RUJDAAA/COMMARFORPAC CMD OPS CNTR
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CG III MEF
RUJDAAA/MAG TWO FOUR
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RHHMDBA/COMSUBPAC PEARL HARBOR HI
ZEN/COMNAVSAFECEN NORFOLK VA
RUIAAAA/JOINT TASK FORCE HOMELAND DEFENSE FT SHAFTER HI
ZEN/CCGDFOURTEEN HONOLULU HI
ZEN/COMSC NORFOLK VA
ZEN/CTF 33
ZEN/COMSC PAC SAN DIEGO CA
ZEN/COMEODGRU ONE
ZEN/COMEODGRU TWO
ZEN/USNS SALVOR
ZEN/EODMU ELEVEN
ZEN/MOBDIVSALU ONE
ZEN/MOBDIVSALU TWO
RUJDAAA/HMH FOUR SIX THREE
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
BT
UNCLAS FOR OFFICIAL USE ONLY//N04002//
PASS TO OFFICE CODES:
CNO WASHINGTON DC//N3/N5/N30N/N31/N98/N98F/N09F/N09FB//
COMNAVAIRPAC SAN DIEGO CA//N45/N452/N45A/N455/N45S//
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMNAVAIRSYSCOM PATUXENT RIVER MD//50F//
COMPACFLT PEARL HARBOR HI//N3/N4/N43/N01PA/N01SJA//
MSGID/GENADMIN/COMPACFLT/-/FEB//
SUBJ/(U) COMPACFLT REQUEST FOR SUPSALV UNDERWATER RECOVERY SUPPORT//
REF/A/MSG/MARFORPAC/210135ZJAN16//
REF/B/MSG/MARFORPAC/011811ZFEB16//
REF/C/MSG/COMPACFLT/230910ZJAN16//
REF/D/DOC/CNO/11DEC07//
NARR/(U/FOUO) REF A IS MARFORPAC REQUEST FOR AIRCRAFT SALVAGE
SUPPORT. REF B IS MOD 001 TO MARFORPAC REQUEST SALVAGE/RECOVERY

ENCLOSURE (185)

SUPPORT. REF C IS CPF TASKORD TO C3F TO CONDUCT DIVING AND SALVAGE OPERATIONS FOR TWO USMC CH-53E AIRCRAFT. REF D IS OPNAVINST 4740.2G, SALVAGE AND RECOVERY PROGRAM.//
TIMEZONE/Z//
RMKS/(U/FOUO) 1. PER REF B, COMPACFLT REQUESTS SALVAGE SUPPORT FROM SUPSALV TO CONDUCT SALVAGE OF THE FOLLOWING AIRCRAFT PARTS LOCATED DEEPER THAN 300FSW WHICH IS BEYOND THE CAPABILITY OF CPF ASSIGNED ASSETS; ALL STAKEHOLDERS DEEM SALVAGE COSTS ARE JUSTIFIED TO SUPPORT THE AIRCRAFT MISHAP INVESTIGATION.
1.A. (U) PER REF D, NAVAL AIR SYSTEMS COMMAND HAS RESPONSIBILITY TO FUND SUPSALV SUPPORT OF SALVAGE OPERATIONS IN COORDINATION WITH OPNAV.
2. (U) AIRCRAFT PARTS AS FOLLOWS:
2.A. (U) COCKPIT AREA
2.A.1. (U) HUMAN REMAINS
2.A.2. (U) NR 1/NR 2 NOSE E-BAY
2.A.3. (U) COMM/COMPUTERS/IMDS/AIR DATA COMPUTER/GPS
2.A.4. (U) CONTROL INPUT
2.A.5. (U) ALL CONTROL/INSTRUMENT PANELS
2.A.6. (U) ACCESSORY GEAR BOX AND ALL ATTACHMENTS
2.A.7. (U) BROOM CLOSET
2.A.8. (U) PILOT AND AIRCREW G SEATS
2.A.9. (U) LANDING GEAR
2.B. (U) GEAR BOXES/FLIGHT CONTROL INPUT
2.B.1. (U) TAIL
2.B.2. (U) MAIN GEARBOX
2.B.3. (U) ENGINES/NOSE GEARBOX/DRIVE SHAFTS
2.B.4. (U) ALL ROTOR BLADES
2.C. (U) MISCELLANEOUS ITEMS
2.C.1. (U) LANDING GEAR
2.C.2. (U) FUSELAGE
2.C.3. (U) CHARRING
2.C.4. (U) PERSONAL ITEMS
2.D. (U) HAZARDS
2.D.1. (U) CADS
2.D.2. (U) IBIS
2.D.3. (U) FIRE BOTTLE
2.D.4. (U) ICE DETECTION SYSTEM
2.D.5. (U) PENCIL FLARES
2.D.6. (U) IBIS SENSORS
2.D.7. (U) HABD BOTTLE
2.D.8. (U) APP ACCUMULATOR
3. (U) POINTS OF CONTACT:
3.A. (U) AVIATION MISHAP BOARD:
3.A.1. (U) (b)(6) (b) (3) 10 USC § 130b /MAG-24/SENIOR MEMBER/COMM (b)(6) (b) (3) 10 USC § 130b
3.A.2. (U) (b)(6) (b) (3) 10 USC § 130b /AIRCRAFT OPERATIONS/COMM (b)(6) (b) (3) 10 USC § 130b
3.A.3. (U) (b)(6) (b) (3) 10 USC § 130b / MAG-24/AIRCRAFT MAINTENANCE/COMM (b)(6) (b) (3) 10 USC § 130b
3.A.4. (U) (b)(6) (b) (3) 10 USC § 130b /HMH-463/AVIATION SAFETY/COMM (b)(6) (b) (3) 10 USC § 130b
3.A.5. (U) (b)(6) (b) (3) 10 USC § 130b /MAG-24/FLIGHT SURGEON/COMM (b)(6) (b) (3) 10 USC § 130b
3.B. (U) MARFORPAC:
3.B.1. (U) (b)(6) (b) (3) 10 USC § 130b /AVIATION SAFETY OFFICER/COMM (b)(6) (b) (3) 10 USC § 130b
3.B.2. (U) (b)(6) (b) (3) 10 USC § 130b /AVIATION BUDGET OFFICER/COMM (b)(6) (b) (3) 10 USC § 130b
3.B.3. (U) MARFORPAC COC WATCH OFFICER/COMM 808-477-0077/EMAIL: MARFORPAC.COC.WO(AT)USMC.MIL
3.C. (U) NAVAL SAFETY CENTER:
3.C.1. (U) (b)(6) (b) (3) 10 USC § 130b /AVIATION MISHAP INVESTIGATIONS

020437Z Feb 16

DEPARTMENT HEAD/COMM (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

3.D. (U) COMPACFLT:

3.D.1. (U) (b)(6), (b)(3)

(b)(6), (b)(3)

3.D.2. (U) MARITIME AIR OPS/ (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

3.D.3. (U) DIVING AND SALVAGE OFFICER/ (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

3.D.4. (U) COMPTROLLER/ (b)(6) (b) (3) 10 USC § 130b

EMAIL: (b)(6) (b) (3) 10 USC § 130b

3.D.5. (U) ENVIRONMENTAL READINESS DIVISION/ (b)(6), (b)(3)

(b)(6) (b) (3) 10 USC § 130b

BT

#7618

7744

NNNN

Received from AUTODIN 020444Z Feb 16

UNCLAS
SALVAGE ASSISTANCE REQUEST APPROVAL(U)//

Originator: CNO WASHINGTON DC
DTG: 031947Z Feb 16 Precedence: R DAC: General
CC: HQ USPACOM HONOLULU HI, COMMARFORPAC CMD OPS CNTR, COMMARFORPAC G THREE,
COMMARFORPAC SAFETY, More...

RAAUZYUW RHOISTA5420 0342105-UUUU--RUJDAAA.
ZNR UUUUU
R 031947Z FEB 16
FM CNO WASHINGTON DC
TO ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
INFO ZEN/COMNAVSEASYSCOM WASHINGTON DC
RUICAAA/HQ USPACOM HONOLULU HI
ZEN/COMTHIRDFLT
ZEN/COMUSFLTFORCOM NORFOLK VA
ZEN/COMNAVAIRPAC SAN DIEGO CA
ZEN/COMNAVAIRSYSCOM PATUXENT RIVER MD
ZEN/COMNAVREG PEARL HARBOR HI
RUJDAAA/COMMARFORPAC CMD OPS CNTR
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CG III MEF
RUJDAAA/MAG TWO FOUR
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RHHMDBA/COMSUBPAC PEARL HARBOR HI
ZEN/COMNAVSAFECEN NORFOLK VA
RUJDAAA/HMH FOUR SIX THREE
ZEN/CNO WASHINGTON DC
BT
UNCLAS
MSGID/GENADMIN/CNO WASHINGTON DC//
SUBJ/SALVAGE ASSISTANCE REQUEST APPROVAL(U)//
REF/A/DOC/CNO/11DEC2007//
REF/B/GENADMIN/COMPACFLT/020437ZFEB2016//
REF/C/MSG/MARFORPAC/210135ZJAN16//
REF/D/MSG/MARFORPAC/011811ZFEB16//
REF/E/MSG/NAVAIR/011743ZFEB16//
NARR/REF A IS OPNAVINST 4740.2G SALVAGE AND RECOVERY PROGRAM. REF B
IS COMPACFLT REQUEST FOR
SUPSALV UNDERWATER RECOVERY SUPPORT. REF C IS MARFORPAC REQUEST FOR
AIRCRAFT SALVAGE SUPPORT.
REF D IS MOD 001 TO REF C. REF E IS EMAIL BETWEEN (b) (6)
NAVAIR, AND (b)(6) (b) (3) 10 USC § 130b
COMPACFLT, CITING NAVAIRS ACCEPTANCE OF FUNDING RESPONSIBILITY OF THE
AIRCRAFT SALVAGE
OPERATION.//
POC/ (b)(6) (b) (3) 10 USC § 130b
/EMAIL (b)(6) (b) (3) 10 USC § 130b/
POC/ (b)(6) (b) (3) 10 USC § 130b
/EMAIL (b)(6) (b) (3) 10 USC § 130b
GENTEXT/REMARKS/1. SALVAGE ASSISTANCE TO SUPPORT THE AIRCRAFT MISHAP
BOARD AS REQUESTED IN REF
B IS APPROVED.
2. FUNDING: NAVAIR WILL FUND THE SALVAGE AND RECOVERY OPERATION.
SUPSALV WILL COORDINATE WITH
COMPACFLT COMPTROLLER AND NAVAIR COMPTROLLER FOR FUNDING. DO NOT
EXCEED ANY NAVAIR/PACFLT FUNDING
LIMITS.
FUNDING POCS:

ENCLOSURE (185)

031947Z Feb 16

(b)(6) (b) (3) 10 USC § 130b /EMAIL: (b)(6) (b) (3) 10 USC § 130b /TEL
: (b)(6) (b) (3) 10 USC § 130b
(b)(6) (b) (3) 10 USC § 130b /COMPACFLT/EMAIL

(b)(6) (b) (3) 10 USC § 130b

3. DIRLAUTH BETWEEN COMPACFLT, COMTHIRDFLT, NAVAIR AND SUPSALV.
COMPACFLT IS DIRECTED TO PROMULGATE
A COMMAND AND CONTROL STRUCTURE THAT INTEGRATES SUPSALV ASSETS INTO
THE AIRCRAFT SALVAGE SUPPORT
OPERATION.
4. KEEP CNO N311 INFORMED OF PROGRESS.//
BT
#5420
0422

NNNN
Received from AUTODIN 032105Z Feb 16

UNCLAS FOUO
MARFORPAC DIVING-SALVAGE SERVICE REQUEST//

Originator: COMTHIRDFLT
DTG: 052133Z Feb 16 Precedence: O DAC: General
CC: COMMARFORPAC, COMMARFORPAC ALD, COMMARFORPAC G THREE, COMMARFORPAC SAFETY,
More...

OAAUZYUW RHOISTA3256 0362133-UUUU--RUJDAAA.
ZNR UUUUU
O 052133Z FEB 16
FM COMTHIRDFLT
TO ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMEODGRU ONE
ZEN/CTF 33
ZEN/COMNAVSURFGRU MIDPAC
INFO ZEN/CNO WASHINGTON DC
ZEN/CMC SD WASHINGTON DC
ZEN/CMC WASHINGTON DC
ZEN/COMNECC LITTLE CREEK VA
ZEN/COMNECCPAC PEARL HARBOR HI
RUJDAAA/COMMARFORPAC
RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
ZEN/COMNAVSEASYSCOM WASHINGTON DC
ZEN/COMNAVSAFECEN NORFOLK VA
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CG III MEF
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
ZEN/COMEODGRU TWO
ZEN/USNS SALVOR
ZEN/MOBDIVSALU ONE
ZEN/EODMU ELEVEN
RUJDAAA/MAG TWO FOUR
RUJDAAA/HMH FOUR SIX THREE
ZEN/COMTHIRDFLT
BT
UNCLAS F O U O
MSGID/ORDER/COMTHIRDFLT/16-014/FEB/
SUBJ/MARFORPAC DIVING-SALVAGE SERVICE REQUEST//
REF/A/DOC/CNO/13 MAY 14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/202146Z JAN 16//
REF/D/MSG/SECNAV WASHINGTON DC/161750Z MAR 98//
REF/E/MSG/MARFORPAC/210135Z JAN 16//
REF/F/EMAIL/CPF/21 JAN 16//
REF/G/MSG/CPF/230910Z JAN 16//
REF/H/MSG/C3F/231701Z JAN 16//
REF/I/VOCO/C3F/28JAN16//
REF/J/MSG/C3F/020058Z FEB 16//
REF/K/MSG/CPF/020437Z FEB 16//
NARR/REF A IS OPNAVINST 3750.6S, NAVAL AVIATION SAFETY
MANAGEMENT SYSTEM.
REF B IS OPNAVINST 4740.2G, SALVAGE AND RECOVERY PROGRAM.
REF C IS MAG-24 SALVAGE REQUEST.
REF D IS ALNAV 020/98; DON SALVAGE POLICY.
REF E IS MARFORPAC REQUEST FOR RAPID SALVAGE/RECOVERY ASSISTANCE.

ENCLOSURE (185)

REF F IS COMPACFLT VOCO TO COMMENCE MOVEMENT OF C3F ASSETS.
REF G IS COMPACFLT TASKORD TO SUPPORT MARFORPAC SALVAGE
REQUEST.
REF H IS C3F TASKORD 16-009 TO SUPPORT MARFORPAC SALVAGE REQUEST.
REF I IS VOCO FROM C3F TO CTF-33 TO SUPPORT SALVAGE OPERATION WITH
USNS NAVAJO.
REF J IS FRAGO 001 TO TASKORD 16-009.
REF K IS CPF REQUEST TO OPNAV FOR NAVSEA 00C
SALVAGE SUPPORT.//
ORDTYP/FRAGORD/002/COMTHIRDFLT//
TIMEZONE/Z//
RMKS/THIS IS C3F FRAGORD 002 TO C3F TASKORD 16-009 DIRECTING
CTF-33 AND EODGRU-1 TO SUSPEND SALVAGE OPERATIONS OF TWO
USMC CH-53E AIRCRAFT IVO NORTH SHORE, OAHU, HI AND SUPPORT
FOLLOW ON NAVSEA OOC SALVAGE OPERATIONS. CHANGED AND ADDED
TASKING FOR CTF-33 AND EODGRU-1. THIS ORDER TERMINATES UPON
COMPLETION OF RECOVERY AND
REDEPLOYMENT.//
GENTEXT/SITUATION/
1. SITUATION. AFTER ANALYSIS OF DATA COLLECTED FROM MDSU-1 THRU
VARIOUS SOURCES IVO OF MISHAP AREA AND AT DEPTHS LESS THAN 300FSW,
IT HAS BEEN DETERMINED ONE OF NINETEEN ITEMS WERE PART OF THE
MISHAP. A FOUR FOOT PIECE OF A ROTOR BLADE WAS FOUND AT 287FSW.
COMPACFLT HAS REQUESTED NAVSEA OOC CAPABILITY FOR THE RECOVERY OF
THE WRECKAGE DUE TO THE EXCESSIVE DEPTHS BEYOND THE OPERATIONAL
LIMITS OF ORGANIC ASSETS, AS WELL AS THE ONE ITEM FOUND IN
LESS THAN 300FSW.//
GENTEXT/MISSION/
2. MISSION. NO CHANGE.//
GENTEXT/EXECUTION/
3. EXECUTION.
3.A. COMMANDERS INTENT. NO CHANGE.//
4. TASKS.
4.A. EODGRU-1.
4.A.1. BPT TO SUPPORT NAVSEA OOC WITH HUMAN REMAINS TRANSFER FOR
THE DURATION OF OPERATION. CURRENTLY THERE IS NO ASSISTANCE
REQUIRED FROM MDSU-1 FOR REMAINS HANDLING, THIS OPERATION IS BEING
CONDUCTED BY NAVSEA 00C AND USMC DESIGNATED PERSONNEL ONBOARD
USNS SALVOR (SAL).
4.A.3-7. NO CHANGES.
4.A.8. BPT SUPPORT NAVSEA OOC/MARFORPAC WITH SMALL BOAT TRANSFERS
TO/FROM SALVOR AND SHORE.
4.A.9. BPT SUPPORT NAVSEA OOC WITH AREA SEARCH CAPABILITY
AS REQUIRED. SEE PARA 4.A.14.
4.A.10. SUPPORT NAVSEA OOC WITH MDSU-1 LNO, PERSONNEL MUST
BE 03/04 AND FAMILIAR WITH THE PROCESS OF THE PENDING
NAVSEA 00C MISSION AND PREVIOUS SEARCH OPERATION.
4.A.11. REDEPLOY MDS CO 11-7. SEE PARA 4.A.14.
4.A.12. ICW NAVSEA 00C AND CTF-33/USNS SALVOR (SAL) OFF LOAD
NON-ESSENTIAL EQUIPMENT FROM SAL PRIOR TO SHIFTING TO FISC PIER
IN PREPARATIONS FOR NAVSEA 00C SALVAGE OPERATIONS.
4.A.13. PROVIDE SAL WITH FIVE QUALIFIED PERSONNEL TO ASSIST WITH
MOORING/RIGGING
AND AS REQUIRED ACT AS SURFACE SWIMMERS. NO SCUBA SUPPORT IS NEEDED.
4.A.14. ICW WITH NAVSEA00C REEVALUATE ALL EODGRU-1 SUPPORT NEEDED
THROUGHOUT THE DURATION OF SALVAGE OPERATIONS IOT RECOMMEND ANY
CHANGES TO C3F.//
4.B. CTF-33.
4.B.1. NO CHANGE.
4.B.2. NO CHANGE.
4.B.3. SOURCE AND PROVIDE USNS SALVOR (ARS) TO SUPPORT NAVSEA OOC
SALVAGE EFFORTS FOR DURATION OF MISSION.
4.B.3.1. NO CHANGE.

4.B.4. RELEASE USNS NAVAJO (T-ATF) FROM TASKING TO SUPPORT SALVAGE OPERATIONS.
4.B.5. ICW NAVSEA 00C PROJECT MANAGER BPT SHIFT SAL FROM ALPHA PIER TO FISC PIER.
4.C. COMNAVSURFGRUMIDPAC
4.C.1. NO CHANGE.
5. REQUEST.
5.A. COMPACFLT (CPF).
5.A.1. PER REF K, REQUEST CPF PLACE NAVSEA 00C SALVAGE UNIT TACON TO COMTHRIDFLT FOR SALVAGE OPERATIONS.
5.B. NAVSEA 00C (SUPSALV)
5.B.1. REQUEST NAVSEA 00C PROJECT MANAGER DELIVER DAILY SUMMARY OF OPERATIONS NLT 1800Z/0800 HST/0600 PST TO C3F FWO AND N35 POC.
5.B.2. REQUEST NAVSEA 00C PROJECT MANAGER KEEP C3F INFORMED ON ANY MAJOR ISSUES OR CONCERNS AS SOON AS POSSIBLE DURING SALVAGE OPERATIONS.
6. PLANNING GUIDANCE. NO CHANGE.//
7. COORDINATING INSTRUCTIONS.
7.A-G. NO CHANGES.
7.H. ICW CPF AND C3F, EODGRU-1 AND CTF-33 DIRLAUTH WITH NAVSEA OOC (SUPSALV) PERSONNEL TO DETERMINE EXTENT OF SUPPORT REQUIRED. KEEP C3F POC INFORMED.//
8. PUBLIC AFFAIRS (PA). NO CHANGE.//
GENTEXT/ADMIN AND LOGISTICS/
9. NO CHANGE.
10. FUNDING. NO CHANGE.//
GENTEXT/COMMAND AND SIGNAL/
11. COMMAND RELATIONSHIPS. MARFORPAC IS THE CONTROLLING CUSTODIAN FOR OPERATION AND IS THE SUPPORTED COMPONENT COMMANDER. COMPACFLT IS THE SUPPORTING COMPONENT COMMANDER, COMTHIRDFLT IS THE SUPPORTING OPERATIONAL COMMANDER, NAVSEA OOC (SUPSALV) IS THE ON SCENE COMMANDER FOR SALVAGE OPERATIONS.
11.A. UPDATED C2 TASKORG HAS BEEN DEVELOPED AND DISTRIBUTED VIA SEPCOR. CONTACT C3F POC FOR DISTRIBUTION.
12. POINTS OF CONTACT:
12.A. C3F:
12.A.1. FLEET WATCH OFFICER/
COMM: 619-524-9534/
EMAIL: C3F_FWO.FCT(AT)NAVY.(SMIL.)MIL

(b)(6) (b) (3) 10 USC § 130b

12.B. COMPACFLT:
12.B.1. BATTLE WATCH CAPTAIN/
COMM: 808-474-5452/
EMAIL: CPF.CATBWC(AT)NAVY.(SMIL.)MIL

(b)(6) (b) (3) 10 USC § 130b

12.C. CTF-33

(b)(6) (b) (3) 10 USC § 130b

12.D. AVIATION MISHAP BOARD:

(b)(6) (b) (3) 10 USC § 130b

052133Z Feb 16

(b)(6) (b) (3) 10 USC § 130b

12.E. MARFORPAC:

(b)(6) (b) (3) 10 USC § 130b

12.E.3. MARFORPAC COC WATCH OFFICER/
COMM 808-477-0077/
EMAIL: MARFORPAC.COC.WO(AT)USMC.MIL

(b)(6) (b) (3) 10 USC § 130b

12.F. NAVAL SAFETY CENTER:

(b)(6) (b) (3) 10 USC § 130b

12.G. NAVSEA 00C (SUPSALV)

(b)(6) (b) (3) 10 USC § 130b

BT
#3256
0DC5

NNNN
Received from AUTODIN 052134Z Feb 16

202146Z Jan 16

UNCLAS FOR OFFICIAL USE ONLY
SUBJ: REQUEST SALVAGE SUPPORT//

Originator: MAG TWO FOUR
DTG: 202146Z Jan 16 Precedence: R DAC: General
To: COMMARFORPAC G THREE
CC: COMMARFORPAC ALD, COMMARFORPAC SAFETY, CG III MEF G THREE, CG FIRST MAW G THREE,
More...

RAAUZYUW RUJDAAA4448 0202155-UUUU--RUJDAAA.
ZNR UUUUU ZDH ZUI RUEOMCH5404 0202156
R 202146Z JAN 16
FM MAG TWO FOUR
TO RUJDAAA/COMMARFORPAC G THREE
INFO RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
RUJDAAA/MAG TWO FOUR
BT
UNCLAS FOR OFFICIAL USE ONLY
SUBJ/SUBJ: REQUEST SALVAGE SUPPORT//
REF/A/DOC/CNO/13MAY14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/2 1748Z SEP 2016//
NARR/REF A IS OPNAVINST 3750.6S, SUBJ: NAVAL AVIATION SAFETY
MANAGEMENT SYSTEM. REF B IS OPNAVINST 4740.2G, SUBJ: SALVAGE AND
RECOVERY PROGRAM. REF C IS THE UPDATE TO THE INITIAL NOTIFICATION OF
HMH-463 (MISHAP DATA REPORT)//
POC/ (b)(6) (b) (3) 10 USC § 130b /MAJ/DIRECTOR OF SAFETY AND STANDARDIZATION/MARINE
AIR GROUP-24 (b)(6) (b) (3) 10 USC § 130b EMAIL:
(b)(6) (b) (3) 10 USC § 130b //
RMKS/1. PER REFS A AND B, AND AS REQUESTED BY REF C, RAPID SALVAGE
SUPPORT IS REQUESTED FOR TWO CH-53E AIRCRAFT WRECKAGE.
A. INFORMATION ON AIRCRAFT 1
(1) BUNO: 163061
(2) SIDE NUMBER: 05
B. LOCATION: 21 38.01N 158 07.538W
(1) LOCATED APPROX 1.7 NM NORTHWEST OF HALEIWA, OAHU, HAWAII.
(2) DATE/TIME OF WRECKAGE: 14 JANUARY 2016 / 2235 (LOCAL)
(3) WATER CURRENT AT TIME OF WRECKAGE: UNKNOWN.
C. WATER DEPTH: 75-100 METERS
D. AIRCRAFT WEIGHT AT TIME OF MISHAP:
(1) BASIC WEIGHT: 36,803
(2) CARGO: 1,000
(3) FUEL: 8,500 LBS
(4) TOTAL: 47,503 LBS
E. EXTERNAL ORDNANCE: NONE
F. PRESSURIZED CYLINDERS/CONTAINERS
(1) TIRES:
NOSE: 105-115 PSI NITROGEN (2)
MAIN: 155-165 PSI NITROGEN (4)
(2) LANDING GEAR STRUTS
NOSE: APPROX. 800 PSI NITROGEN
MAIN: APPROX. 1500 PSI NITROGEN
(3) APP START ACCUMULATOR (2): 1600-1700 PSI NITROGEN/2200-3000
PSI WITH HYDRAULIC FLUID
(4) EMERGENCY LANDING GEAR EXTENSION BOTTLE: 2200-3150 PSI
NITROGEN
(5) TAIL SKID: 260-300 PSI NITROGEN
(6) DAMPER ACCUMULATOR: 1000 +/- 50 PSI NITROGEN
(7) ENGINE FIRE BOTTLE (3):600 PSI NITROGEN

ENCLOSURE (185)

(8) APU FIRE BOTTLE: 600 PSI NITROGEN

G. CARTRIDGE ACTUATED DEVICES AND EXPLOSIVE ITEMS

(1) #1 ENGINE MAIN FIRE BOTTLE CAD
(2) #1 ENGINE RESERVE FIRE BOTTLE CAD
(3) #2 ENGINE MAIN FIRE BOTTLE CAD
(4) #2 ENGINE RESERVE FIRE BOTTLE CAD
(5) #3 ENGINE MAIN FIRE BOTTLE CAD
(6) #3 ENGINE RESERVE FIRE BOTTLE CAD
(7) LH AUX FUEL TANK CADS (2)
(8) RH AUX FUEL TANK CADS (2)
(9) CARGO RELEASE SINGLE POINT CAD
(10) RESCUE HOIST CAD

H. CLASSIFIED EQUIPMENT

(1) KY-58
(2) KY-58
(3) R/T 1851A SATELLITE/VHF/UHF COMMUNICATIONS RECEIVER/TRANSMITTER
(4) ALE-47 PROGRAMMER
(5) KIT 1-C
(6) AAR-47 CENTRAL PROCESSOR
(7) AAR-47 OPTICAL SENSOR-CONVERTER (X4)
(8) AAR-47 CONTROL INDICATOR
(9) APR-39 RADAR RECEIVER (X2)
(10) APR-39 SPIRAL ANTENNA (X5)
(11) APR-39 RADAR WARNING CONTROL PANEL
(12) APR-39 RADAR SIGNAL INDICATOR
(13) ALE-47 DUAL DESPENSOR POD (X2)
(14) ALE-47 DIGITAL CONTROL DISPLAY UNIT

I. ADDITIONAL HAZARDS:

(1) CRASHWORTHY LEAD ACID BATTERY
(2) LITHIUM BATTERIES
(3) AA ALKALINE BATTERIES
(4) INFLIGHT BLADE INSPECTION SYSTEM CONTAINS 3500 MICROCURIES OF STRONTIUM 90
(5) ICE DETECTOR PROBE CONTAINS 50 MICROCURIES OF STRONTIUM 90
(6) FIRE SUPPRESSION SYSTEM CONTAINS 4.5 LBS OF MONOBROMOTRIFLUOROMETHANE

J. ITEMS CONSIDERED BUT NOT APPLICABLE:

(1) STATUS OF AUXILIARY TANKS IS NOT KNOWN
(2) STATUS OF ALL MAIN ROTOR BLADES AND TAIL ROTOR BLADES IS UNKNOWN

K. INFORMATION ON AIRCRAFT 2

(1) BUNO: 161255
(2) SIDE NUMBER: 06

L. LOCATION: 21 38.01N 158 07.538W

(1) LOCATED APPROX 1.7 NM NORTHWEST OF HALEIWA, OAHU, HAWAII.
(2) DATE/TIME OF WRECKAGE: 14 JANUARY 2016 / 1035 (LOCAL)
(3) WATER CURRENT AT TIME OF WRECKAGE: UNKNOWN.

M. WATER DEPTH: 75-100 METERS

N. AIRCRAFT WEIGHT AT TIME OF MISHAP:

(1) BASIC WEIGHT: 40,989
(2) CARGO: 1,000
(3) FUEL: 9,000 LBS
(4) TOTAL: 50,989 LBS

O. EXTERNAL ORDNANCE: NONE

P. PRESSURIZED CYLINDERS/CONTAINERS

(1) TIRES:
NOSE: 105-115 PSI NITROGEN (2)
MAIN: 155-165 PSI NITROGEN (4)
(2) LANDING GEAR STRUTS
NOSE: APPROX. 800 PSI NITROGEN
MAIN: APPROX. 1500 PSI NITROGEN
(3) APP START ACCUMULATOR (2): 1600-1700 PSI NITROGEN/2200-3000

PSI WITH HYDRAULIC FLUID
(4) EMERGENCY LANDING GEAR EXTENSION BOTTLE: 2200-3150 PSI NITROGEN
(5) TAIL SKID: 260-300 PSI NITROGEN
(6) DAMPER ACCUMULATOR: 1000 +/- 50 PSI NITROGEN
(7) ENGINE FIRE BOTTLE (3):600 PSI NITROGEN
(8) APU FIRE BOTTLE: 600 PSI NITROGEN
Q. CARTRIDGE ACTUATED DEVICES AND EXPLOSIVE ITEMS
(1) #1 ENGINE MAIN FIRE BOTTLE CAD
(2) #1 ENGINE RESERVE FIRE BOTTLE CAD
(3) #2 ENGINE MAIN FIRE BOTTLE CAD
(4) #2 ENGINE RESERVE FIRE BOTTLE CAD
(5) #3 ENGINE MAIN FIRE BOTTLE CAD
(6) #3 ENGINE RESERVE FIRE BOTTLE CAD
(7) LH AUX FUEL TANK CADS (2)
(8) RH AUX FUEL TANK CADS (2)
(9) CARGO RELEASE SINGLE POINT CAD
(10) RESCUE HOIST CAD
R. CLASSIFIED EQUIPMENT
(1) KY-58
(2) KY-58
(3) R/T 1851A SATELLITE/VHF/UHF COMMUNICATIONS RECEIVER/TRANSMITTER
(4) ALE-47 PROGRAMMER
(5) KIT 1-C
(6) DIRECTIONAL INFRARED COUNTERMEASURES (DIRCM) USER DATA MODULE (UDM) PMCIA CARD
(7) DIRCM GUARDIAN LASER TRANSMITTER ASSEMBLY (GLTA) (X2)
(8) DIRCM INFRARED COUNTERMEASURES SENSOR (X5)
(9) DIRCM EMBEDDED GPS INERTIAL SYSTEM
(10) DIRCM COUNTERMEASURES SIGNAL PROCESSOR
(11) DIRCM COUNTERMEASURES SET CONTROL
(12) AAR-47 CENTRAL PROCESSOR
(13) AAR-47 OPTICAL SENSOR-CONVERTER (X4)
(14) AAR-47 CONTROL INDICATOR
(15) APR-39 RADAR RECEIVER (X2)
(16) APR-39 SPIRAL ANTENNA (X5)
(17) APR-39 RADAR WARNING CONTROL PANEL
(18) APR-39 RADAR SIGNAL INDICATOR
(19) ALE-47 DUAL DESPENSOR POD (X2)
(20) ALE-47 DIGITAL CONTROL DISPLAY UNIT
S. ADDITIONAL HAZARDS:
(1) CRASHWORTHY LEAD ACID BATTERY
(2) LITHIUM BATTERIES
(3) AA ALKALINE BATTERIES
(4) INFLIGHT BLADE INSPECTION SYSTEM CONTAINS 3500 MICROCURIES OF STRONTIUM 90
(5) ICE DETECTOR PROBE CONTAINS 50 MICROCURIES OF STRONTIUM 90
(6) FIRE SUPPRESSION SYSTEM CONTAINS 4.5 LBS OF MONOBROMOTRIFLUOROMETHANE
T. ITEMS CONSIDERED BUT NOT APPLICABLE:
(1) STATUS OF AUXILIARY TANKS IS NOT KNOWN
(2) STATUS OF ALL MAIN ROTOR BLADES AND TAIL ROTOR BLADES IS UNKNOWN
(3) PILOT AND COPILOT SIDE WINDOWS WERE JETTISONED
(4) AIRCRAFT WAS LAST WITNESSED TO BE INVERTED AND PYLON INTACT
2. NAME AND ADDRESS OF OWNER: HMH-463 MARINE AIR GROUP-24 BOX 63055 MCBH KANEOHE BAY, HI 96863
3. REQUEST RAPID SALVAGE/RECOVERY ASSISTANCE DUE TO DEGRADATION OF EVIDENCE ASSOCIATED WITH EXPOSURE TO SEAWATER TO AID IN THE MISHAP INVESTIGATION, PREVENT ENVIRONMENTAL DAMAGE FROM LEAKING OIL, FUEL AND DEBRIS, AND TO PREVENT FURTHER LOSS OF LIFE AND AIRCRAFT OF THIS PATICULAR MAKE AND MODEL. REQUEST MEDICAL EXAMINER SUPPORT FOR

202146Z Jan 16

POSSIBLE RECOVERY OF REMAINS.
4. AVIATION MISHAP BOARD:
- (b)(6) (b) (3) 10 USC § 130b MAG-24/SENIOR MEMBER/COMM

(b)(6) (b) (3) 10 USC § 130b

BT
#4448
FODO

NNNN
Received from AUTODIN 202156Z Jan 16

UNCLAS
REQUEST SALVAGE/RECOVERY SUPPORT

Originator: COMMARFORPAC SAFETY
DTG: 210135Z Jan 16 Precedence: R DAC: General
To: COMPACFLT PEARL HARBOR HI, COMPACFLT PEARL HARBOR HI, COMNAVSAFECEN NORFOLK VA

CC: CMC SD WASHINGTON DC, CMC WASHINGTON DC, USNS SALVOR, COMTHIRDFLT, More...

RAAUZYUW RUJDAAA4528 0210232-UUUU--RUJDAAA.
ZNR UUUUU ZDH ZUI RUEOMCH5823 0210233
R 210135Z JAN 16
FM COMMARFORPAC SAFETY
TO RUOIAAA/COMPACFLT PEARL HARBOR HI
RUOIBBB/COMPACFLT PEARL HARBOR HI
RUOIAAA/COMNAVSAFECEN NORFOLK VA
INFO RUJIAAA/CMC SD WASHINGTON DC
RUJIAAA/CMC WASHINGTON DC
RUOIBBB/USNS SALVOR
RUOIAAA/COMTHIRDFLT
RUJDAAA/COMMARFORPAC
RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CG III MEF
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
RUJDAAA/MAG TWO FOUR
RUJDAAA/HMH FOUR SIX THREE
RUOIAAA/CNO WASHINGTON DC
RUOIAAA/COMNAVSEASYSCOM WASHINGTON DC
BT
UNCLAS
SUBJ/REQUEST SALVAGE/RECOVERY SUPPORT
REF/A/DOC/CNO/13 MAY 14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/202146Z JAN 16//
REF/D/MSG/SECNAV WASHINGTON DC/161750Z MAR 98//
NARR/REF A IS OPNAVINST 3750.6S, SUBJ: NAVAL AVIATION SAFETY MANAGEMENT SYSTEM. REF B IS OPNAVINST 4740.2G, SUBJ: SALVAGE AND RECOVERY PROGRAM. REF C IS MAG-24 SALVAGE REQUEST. REF D IS ALNAV 020/98; SUBJ: DON SALVAGE POLICY.//
POC/ (b)(6) (b) (3) 10 USC § 130b /MARFORPAC/TEL: (b)(6) (b) (3) 10 USC § 130b //
RMKS/1. PER REFS A THROUGH D, MARFORPAC REQUESTS RAPID SALVAGE/RECOVERY ASSISTANCE FOR TWO CH-53E AIRCRAFT WRECKAGE DUE TO DEGRADATION OF EVIDENCE ASSOCIATED WITH EXPOSURE TO SEAWATER TO AID IN THE MISHAP INVESTIGATION, PREVENT ENVIRONMENTAL DAMAGE FROM LEAKING OIL, FUEL AND DEBRIS, AND TO PREVENT FURTHER LOSS OF LIFE AND AIRCRAFT OF THIS PARTICULAR MAKE AND MODEL.
A. INFORMATION ON AIRCRAFT 1 (CH-53E)
(1) BUNO: 163061
(2) SIDE NUMBER: 05
B. LOCATION: 21 38.01N 158 07.538W
(1) LOCATED APPROX 1.7 NM NORTHWEST OF HALEIWA, OAHU, HAWAII.
(2) DATE/TIME OF WRECKAGE: 14 JANUARY 2016 / 2235 (LOCAL)
(3) WATER CURRENT AT TIME OF WRECKAGE: UNKNOWN.
C. WATER DEPTH: 75-100 METERS
D. AIRCRAFT WEIGHT AT TIME OF MISHAP:

ENCLOSURE (185)

(1) BASIC WEIGHT: 36,803
(2) CARGO: 1,000
(3) FUEL: 8,500 LBS
(4) TOTAL: 47,503 LBS
E. EXTERNAL ORDNANCE: NONE
F. PRESSURIZED CYLINDERS/CONTAINERS
(1) TIRES:
NOSE: 105-115 PSI NITROGEN (2)
MAIN: 155-165 PSI NITROGEN (4)
(2) LANDING GEAR STRUTS
NOSE: APPROX. 800 PSI NITROGEN
MAIN: APPROX. 1500 PSI NITROGEN
(3) APP START ACCUMULATOR (2): 1600-1700 PSI NITROGEN/2200-3000 PSI WITH HYDRAULIC FLUID
(4) EMERGENCY LANDING GEAR EXTENSION BOTTLE: 2200-3150 PSI NITROGEN
(5) TAIL SKID: 260-300 PSI NITROGEN
(6) DAMPER ACCUMULATOR: 1000 +/- 50 PSI NITROGEN
(7) ENGINE FIRE BOTTLE (3):600 PSI NITROGEN
(8) APU FIRE BOTTLE: 600 PSI NITROGEN
G. CARTRIDGE ACTUATED DEVICES AND EXPLOSIVE ITEMS
(1) #1 ENGINE MAIN FIRE BOTTLE CAD
(2) #1 ENGINE RESERVE FIRE BOTTLE CAD
(3) #2 ENGINE MAIN FIRE BOTTLE CAD
(4) #2 ENGINE RESERVE FIRE BOTTLE CAD
(5) #3 ENGINE MAIN FIRE BOTTLE CAD
(6) #3 ENGINE RESERVE FIRE BOTTLE CAD
(7) LH AUX FUEL TANK CADS (2)
(8) RH AUX FUEL TANK CADS (2)
(9) CARGO RELEASE SINGLE POINT CAD
(10) RESCUE HOIST CAD
H. CLASSIFIED EQUIPMENT
(1) KY-58
(2) KY-58
(3) R/T 1851A SATELLITE/VHF/UHF COMMUNICATIONS RECEIVER/TRANSMITTER
(4) ALE-47 PROGRAMMER
(5) KIT 1-C
(6) AAR-47 CENTRAL PROCESSOR
(7) AAR-47 OPTICAL SENSOR-CONVERTER (X4)
(8) AAR-47 CONTROL INDICATOR
(9) APR-39 RADAR RECEIVER (X2)
(10) APR-39 SPIRAL ANTENNA (X5)
(11) APR-39 RADAR WARNING CONTROL PANEL
(12) APR-39 RADAR SIGNAL INDICATOR
(13) ALE-47 DUAL DESPENSOR POD (X2)
(14) ALE-47 DIGITAL CONTROL DISPLAY UNIT
I. ADDITIONAL HAZARDS:
(1) CRASHWORTHY LEAD ACID BATTERY
(2) LITHIUM BATTERIES
(3) AA ALKALINE BATTERIES
(4) INFLIGHT BLADE INSPECTION SYSTEM CONTAINS 3500 MICROCURIES OF STRONTIUM 90
(5) ICE DETECTOR PROBE CONTAINS 50 MICROCURIES OF STRONTIUM 90
(6) FIRE SUPPRESSION SYSTEM CONTAINS 4.5 LBS OF MONOBROMOTRIFLUOROMETHANE
J. ITEMS CONSIDERED BUT NOT APPLICABLE:
(1) STATUS OF AUXILIARY TANKS IS NOT KNOWN
(2) STATUS OF ALL MAIN ROTOR BLADES AND TAIL ROTOR BLADES IS UNKNOWN
K. INFORMATION ON AIRCRAFT 2
(1) BUNO: 161255
(2) SIDE NUMBER: 06

L. LOCATION: 21 38.01N 158 07.538W
(1) LOCATED APPROX 1.7 NM NORTHWEST OF HALEIWA, OAHU, HAWAII.
(2) DATE/TIME OF WRECKAGE: 14 JANUARY 2016 / 1035 (LOCAL)
(3) WATER CURRENT AT TIME OF WRECKAGE: UNKNOWN.
M. WATER DEPTH: 75-100 METERS
N. AIRCRAFT WEIGHT AT TIME OF MISHAP:
(1) BASIC WEIGHT: 40,989
(2) CARGO: 1,000
(3) FUEL: 9,000 LBS
(4) TOTAL: 50,989 LBS
O. EXTERNAL ORDNANCE: NONE
P. PRESSURIZED CYLINDERS/CONTAINERS
(1) TIRES:
NOSE: 105-115 PSI NITROGEN (2)
MAIN: 155-165 PSI NITROGEN (4)
(2) LANDING GEAR STRUTS
NOSE: APPROX. 800 PSI NITROGEN
MAIN: APPROX. 1500 PSI NITROGEN
(3) APP START ACCUMULATOR (2): 1600-1700 PSI NITROGEN/2200-3000
PSI WITH HYDRAULIC FLUID
(4) EMERGENCY LANDING GEAR EXTENSION BOTTLE: 2200-3150 PSI NITROGEN
(5) TAIL SKID: 260-300 PSI NITROGEN
(6) DAMPER ACCUMULATOR: 1000 +/- 50 PSI NITROGEN
(7) ENGINE FIRE BOTTLE (3):600 PSI NITROGEN
(8) APU FIRE BOTTLE: 600 PSI NITROGEN
Q. CARTRIDGE ACTUATED DEVICES AND EXPLOSIVE ITEMS
(1) #1 ENGINE MAIN FIRE BOTTLE CAD
(2) #1 ENGINE RESERVE FIRE BOTTLE CAD
(3) #2 ENGINE MAIN FIRE BOTTLE CAD
(4) #2 ENGINE RESERVE FIRE BOTTLE CAD
(5) #3 ENGINE MAIN FIRE BOTTLE CAD
(6) #3 ENGINE RESERVE FIRE BOTTLE CAD
(7) LH AUX FUEL TANK CADS (2)
(8) RH AUX FUEL TANK CADS (2)
(9) CARGO RELEASE SINGLE POINT CAD
(10) RESCUE HOIST CAD
R. CLASSIFIED EQUIPMENT
(1) KY-58
(2) KY-58
(3) R/T 1851A SATELLITE/VHF/UHF COMMUNICATIONS
RECEIVER/TRANSMITTER
(4) ALE-47 PROGRAMMER
(5) KIT 1-C
(6) DIRECTIONAL INFRARED COUNTERMEASURES (DIRCM) USER DATA
MODULE (UDM) PMCIA CARD
(7) DIRCM GUARDIAN LASER TRANSMITTER ASSEMBLY (GLTA) (X2)
(8) DIRCM INFRARED COUNTERMEASURES SENSOR (X5)
(9) DIRCM EMBEDDED GPS INERTIAL SYSTEM
(10) DIRCM COUNTERMEASURES SIGNAL PROCESSOR
(11) DIRCM COUNTERMEASURES SET CONTROL
(12) AAR-47 CENTRAL PROCESSOR
(13) AAR-47 OPTICAL SENSOR-CONVERTER (X4)
(14) AAR-47 CONTROL INDICATOR
(15) APR-39 RADAR RECEIVER (X2)
(16) APR-39 SPIRAL ANTENNA (X5)
(17) APR-39 RADAR WARNING CONTROL PANEL
(18) APR-39 RADAR SIGNAL INDICATOR
(19) ALE-47 DUAL DESPENSOR POD (X2)
(20) ALE-47 DIGITAL CONTROL DISPLAY UNIT
S. ADDITIONAL HAZARDS:
(1) CRASHWORTHY LEAD ACID BATTERY
(2) LITHIUM BATTERIES
(3) AA ALKALINE BATTERIES

(4) INFLIGHT BLADE INSPECTION SYSTEM CONTAINS 3500 MICROCURIES OF STRONTIUM 90
(5) ICE DETECTOR PROBE CONTAINS 50 MICROCURIES OF STRONTIUM 90
(6) FIRE SUPPRESSION SYSTEM CONTAINS 4.5 LBS OF MONOBROMOTRIFLUOROMETHANE
T. ITEMS CONSIDERED BUT NOT APPLICABLE:
(1) STATUS OF AUXILIARY TANKS IS NOT KNOWN
(2) STATUS OF ALL MAIN ROTOR BLADES AND TAIL ROTOR BLADES IS UNKNOWN
(3) PILOT AND COPILOT SIDE WINDOWS WERE JETTISONED
(4) AIRCRAFT WAS LAST WITNESSED TO BE INVERTED AND PYLON INTACT
2. NAME AND ADDRESS OF OWNER: HMH-463 MARINE AIR GROUP-24 BOX 63055 MCBH KANEOHE BAY, HI 96863
3. AIRCRAFT MISHAP BOARD (AMB) WILL IDENTIFY AND PRIORITIZE AIRCRAFT WRECKAGE PARTS FOR SALVAGE TO THE ON-SCENE/SHIP COMMANDER WITH SAFETY BEING PARAMOUNT DURING ENTIRE SALVAGE EFFORT. EFFORTS WILL BE MADE TO RECOVER VICTIMS INCIDENTAL TO SALVAGE OPERATIONS.
4. FOR NAVAL SAFETY CENTER: REQUEST COORDINATION OF MEDICAL EXAMINER SUPPORT FOR POSSIBLE RECOVERY OF REMAINS.
5. POINTS OF CONTACT:
A. AVIATION MISHAP BOARD:

(b)(6) (b) (3) 10 USC § 130b

B. MARFORPAC:

(b)(6) (b) (3) 10 USC § 130b

(3) MARFORPAC COC WATCH OFFICER/COMM 808-477-0077/ EMAIL: MARFORPAC.COC.WO@USMC.MIL
C. NAVAL SAFETY CENTER:

(b)(6) (b) (3) 10 USC § 130b

BT
#4528
9ABB

NNNN
Received from AUTODIN 210233Z Jan 16

UNCLAS FOUO
ORDER/COMPACFLT/-/JAN//

Originator: COMPACFLT PEARL HARBOR HI
DTG: 230910Z Jan 16 Precedence: O DAC: General
To: COMMARFORPAC G THREE
CC: HQ USPACOM HONOLULU HI, COMMARFORPAC CMD OPS CNTR, COMMARFORPAC SAFETY, CG III MEF, More...

OAAUZYUW RUOIAAA3482 0230917-UUUU--RUJDAAA.
ZNR UUUUU
O 230910Z JAN 16
FM COMPACFLT PEARL HARBOR HI
TO ZEN/COMTHIRDFLT
RUJDAAA/COMMARFORPAC G THREE
INFO RUICAAA/HQ USPACOM HONOLULU HI
ZEN/CNO WASHINGTON DC
ZEN/COMUSFLTFORCOM NORFOLK VA
ZEN/COMNAVSEASYSCOM WASHINGTON DC
ZEN/COMNAVAIRPAC SAN DIEGO CA
ZEN/COMNAVAIRSYSCOM PATUXENT RIVER MD
ZEN/COMNAVREG PEARL HARBOR HI
ZEN/COMNECC LITTLE CREEK VA
ZEN/COMNECCPAC PEARL HARBOR HI
RUJDAAA/COMMARFORPAC CMD OPS CNTR
RUJDAAA/COMMARFORPAC SAFETY
RUJDAAA/CG III MEF
RUJDAAA/MAG TWO FOUR
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RHHMDBA/COMSUBPAC PEARL HARBOR HI
ZEN/COMNAVSAFECEN NORFOLK VA
RUIAAAA/JOINT TASK FORCE HOMELAND DEFENSE FT SHAFTER HI
ZEN/CCGDFOURTEEN HONOLULU HI
ZEN/COMSC NORFOLK VA
ZEN/CTF 33
ZEN/COMEODGRU ONE
ZEN/COMEODGRU TWO
ZEN/USNS SALVOR
ZEN/EODMU ELEVEN
ZEN/MOBDIVSALU ONE
ZEN/MOBDIVSALU TWO
RUJDAAA/HMH FOUR SIX THREE
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
BT
UNCLAS F O U O //N04002//
MSGID/ORDER/COMPACFLT/-/JAN//
REF/A/MSG/MARFORPAC/210135ZJAN16//
REF/B/EMAIL/CPF/21JAN16//
NARR/(U/FOUO) REF A IS MARFORPAC REQUEST FOR AIRCRAFT SALVAGE SUPPORT. REF B IS COMPACFLT VOCO TO COMMENCE MOVEMENT OF C3F ASSETS.//
ORDTYP/TASKORD/CPF//
TIMEZONE/Z//
RMKS/(U/FOUO) THIS IS A COMPACFLT TASKING ORDER DIRECTING C3F TO CONDUCT DIVING AND SALVAGE OPERATIONS FOR TWO USMC CH-53E AIRCRAFT. THIS ORDER TERMINATES UPON COMPLETION OF RECOVERY AND REDEPLOYMENT.//
GENTEXT/SITUATION/
1. (U/FOUO) SITUATION. AT 0835Z, 15 JAN 16, TWO USMC CH-53E HELICOPTERS COLLIDED AND CRASHED APPROXIMATELY 1.7NM NW OF HALEIWA, HI WITH A TOTAL OF 12 SOULS ONBOARD. BOTH HELICOPTERS HAVE

ENCLOSURE (185)

BEEN LOCATED WITHIN CLOSE PROXIMITY TO EACH OTHER IN 280 FSW.//
GENTEXT/MISSION/
2. (U/FOUO) MISSION. IAW REF A, COMPACFLT PROVIDES DIVING AND SALVAGE SUPPORT FOR AIRCRAFT WRECKAGE RECOVERY AND RELOCATION TO MCAS KANEOHE BAY.//
GENTEXT/EXECUTION/
3. (U) EXECUTION.
3.A. (U) COMMANDERS INTENT.
3.A.1. (U/FOUO) PURPOSE: TO EXECUTE DIVING AND SALVAGE OPERATIONS FOR 2X CH-53E AIRCRAFT IVO NORTH SHORE, OAHU.
3.A.2. (U/FOUO) METHOD: DEPLOY FORCES AND CONDUCT RECOVERY OF AIRCRAFT AND REMAINS.
3.A.3. (U/FOUO) END STATE: AIRCRAFT ARE RECOVERED, REMAINS ARE REPATRIATED, AND FORCES ARE REDEPLOYED.
3.B. (U)TASKS.
3.B.1. (U) COMTHIRDFLT.
3.B.1.A. (U/FOUO) IDENTIFY FORCES REQUIRED TO SUPPORT SALVAGE OPERATIONS. SUPPORT REQUIREMENTS IN REF A.
3.B.1.B. (U/FOUO) DEPLOY FORCES AND EQUIPMENT TO EXECUTE SALVAGE OPERATIONS.
3.B.1.C. (U/FOUO) PROVIDE CONOPS TO CPF NLT 1700W 24 JAN 16 TO INCLUDE TIMELINE OF OPERATIONS, C2, ORM AND CONCERNS OR ISSUES.
3.B.1.D. (U/FOUO) EXECUTE SALVAGE OPERATIONS.
3.B.1.E. (U/FOUO) PROVIDE DAILY UPDATES TO CPF BWC DAILY NLT 1500Z VIA EMAIL WHILE SALVAGE OPS ARE ON-GOING.
3.B.1.F. (U) REDEPLOY UPON COMPLETION OF SALVAGE OPERATIONS.
3.B.2. (U) MARFORPAC.
3.B.2.A. (U/FOUO) REQUEST A LNO FROM THE CONTROLLING CUSTODIAN TO EMBARK USNS SALVOR TO ASSIST IN THE IDENTIFICATION AND DISPOSITION OF AIRCRAFT PARTS AND TO ARTICULATE THE PRIORITIES OF ITEMS TO BE RECOVERED.
3.B.2.B. (U/FOUO) REQUEST DETAILED INSTRUCTIONS/CONOPS FOR THE DISPOSITION OF THE AIRCREW REMAINS.
3.B.2.C. (U/FOUO) REQUEST A PRE-BRIEF FROM THE COGNIZANT MEDICAL EXAMINER TO PROVIDE THE SALVAGE DIVERS SITUATIONAL AWARENESS OF AIRCREW REMAINS PRIOR TO COMMENCING SALVAGE OPERATIONS.
3.C. (U) PLANNING GUIDANCE
3.C.1. (U) TYPE OF AIRCRAFT:
3.C.1.A. (U/FOUO) AIRCRAFT 1: CH-53E, BUNO 163061
3.C.1.B. (U/FOUO) AIRCRAFT 2: CH-53E, BUNO 161255
3.C.2. (U/FOUO) LOCATION OF WRECKAGE (BOTH AIRCRAFT): 1.7NM NW OF HALEIWA, OAHU, HI LATITUDE 21 38.010N / LONGITUDE 158 07.538W.
3.C.3. (U/FOUO) ORDNANCE (BOTH AIRCRAFT): NO EXTERNAL ORDNANCE ALTHOUGH EXPLOSIVE DEVICES EXIST CONSISTING OF CARTRIDGE ACTUATION DEVICES (CAD). REFER TO REF A FOR CAD CONFIGURATION.
3.C.4. (U/FOUO) ADDITIONAL HAZARDS (BOTH AIRCRAFT):
3.C.4.A. (U/FOUO) CRASHWORTHY LEAD ACID BATTERY
3.C.4.B. (U/FOUO) LITHIUM BATTERIES
3.C.4.C. (U/FOUO) AA ALKALINE BATTERIES
3.C.4.D. (U/FOUO) INFLIGHT BLADE INSPECTION SYSTEM CONTAINS 3500 MICROCURIES OF STRONTIUM 90
3.C.4.E. (U/FOUO) ICE DETECTOR PROBE CONTAINS 50 MICROCURIES OF STRONTIUM 90
3.C.4.F. (U/FOUO) FIRE SUPPRESSION SYSTEM CONTAINS 4.5 LBS OF MONOBROMOTRIFLUOROMETHANE
3.C.5. (U/FOUO) CLASSIFIED MATERIAL (BOTH AIRCRAFT):
3.C.5.A. (U/FOUO) TWO KY-58 SECURE VOICE MODULE COMMUNICATION ENCRYPTION DEVICES.
3.C.5.B. (U/FOUO) ONE R/T 1851A SATELLITE/VHF/UHF COMMUNICATIONS.
3.C.6. (U/FOUO) DEPTH (BOTH AIRCRAFT): 230*280 FSW.
3.D. (U/FOUO) COORDINATING INSTRUCTIONS.
3.D.1. (U/FOUO) ENVIRONMENTAL CONCERNS: MAKE ALL REASONABLE EFFORTS TO AVOID ADVERSE IMPACTS TO CORAL AND MARINE LIFE (INCLUDING

HAWAIIAN ISLAND HUMPBACK WHALE NATIONAL MARINE SANCTUARY RESOURCES AS THE SALVAGE MAY BE OCCURRING WITHIN SANCTUARY BOUNDARIES).
3.D.2. (U/FOUO) DIRLAUTH ALCON. C3F DIRLAUTH MARFORPAC AND OTHER SUPPORTING ENTITIES AS REQUIRED. KEEP CPF BWC INFORMED.
3.D.3. (U/FOUO) DURATION: APPROXIMATELY 21 DAYS. CONSIDERATION WILL BE TAKEN INTO THE DIVING AND SALVAGE OPERATIONAL CAPABILITIES BASED ON ENVIRONMENTAL IMPACTS, SPECIFICALLY SEA STATE AND CURRENTS DURING THIS TIME OF YEAR ON THE NORTH SHORE. OPERATIONAL RISK MANAGEMENT (ORM) SHOULD BE ADHERED TO WITH THE UNDERSTANDING THAT A NO-GO CRITERIA WILL IMPACT THE TIMELINE FOR BOTH RECOVERY OF THE AIRCRAFT AND REMAINS REQUESTED BY CONTROLLING CUSTODIAN.
3.D.4. (U/FOUO) NOTIFY CPF IF THE REQUIRED SALVAGE OPERATIONS EXCEED THE CAPABILITY OF ASSIGNED FORCES.
3.E. (U/FOUO) PUBLIC AFFAIRS (PA). PA POSTURE IS PASSIVE. REFER QUERIES TO MFP PA AT COMM 808-477-8308.

(b)(6) (b) (3) 10 USC § 130b

3.E.2. (U/FOUO) COORDINATE RECOVERY TIMELINES WITH ON-SCENE INVESTIGATION TEAM FROM THE NAVAL SAFETY CENTER.
3.F. (U) RELIGIOUS SUPPORT.
3.F.1. (U/FOUO) COORDINATE RELIGIOUS MINISTRY AS REQUIRED.//
GENTEXT/ADMIN AND LOG/
4. (U) ADMIN AND LOG.
4.A. (U/FOUO) FUNDING. FUNDING GUIDANCE TO BE PROVIDED SEPCOR. CAPTURE ALL COSTS ASSOCIATED WITH THIS OPERATION.
4.B. (U/FOUO) SUBMIT REQUESTS FOR SUPPORT TO CPF FOR ADDITIONAL SALVAGE ASSETS (E.G. HEAVY LIFT, BARGES, ETC).
4.C. (U) COORDINATE LNO EXCHANGE AS REQUIRED.//
GENTEXT/COMMAND AND SIGNAL/
5. (U) COMMAND AND SIGNAL.
5.A. (U/FOUO) COMMAND RELATIONSHIPS. MARFORPAC IS THE SUPPORTED COMPONENT COMMANDER. COMPACFLT IS THE SUPPORTING COMPONENT COMMANDER. COMTHIRDFLT IS THE SUPPORTING OPERATIONAL COMMANDER. MOBILE DIVING AND SALVAGE UNIT ONE IS THE ON SCENE COMMANDER FOR SALVAGE OPERATIONS.
5.B. (U) POINTS OF CONTACT:
5.B.1. (U) MCBH: (b)(6) (b) (3) 10 USC § 130b
5.B.2. (U) MAG-24: (b)(6) (b) (3) 10 USC § 130b
5.B.3. (U) AMB SENIOR MEMBER/POC. (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b ;

5.B.6. (U) C3F WATCH OFFICER: NIPR: C3F.FWO(AT)NAVY.MIL; SIPR: C3F_FWO.FCT(AT)NAVY.SMIL.MIL; COM: 619-524-9534, DSN: 524-9534
5.B.7. (U) COMPACFLT:
5.B.7.A. (U) BATTLE WATCH CAPTAIN, 808-474-5452.
EMAIL: CPF.CATBWC(AT)NAVY.(SMIL.)MIL.

(b)(6) (b) (3) 10 USC § 130b

BT
#3482
C164

NNNN

230910Z Jan 16
Received from AUTODIN 230917Z Jan 16

231701Z Jan 16

UNCLAS FOUO
MARFORPAC DIVING-SALVAGE SERVICE REQUEST//

Originator: COMTHIRDFLT
DTG: 231701Z Jan 16 Precedence: O DAC: General
CC: COMMARFORPAC, COMMARFORPAC ALD, COMMARFORPAC G THREE, COMMARFORPAC SAFETY,
More...

OAAUZYUW RHOISTA3901 0231705-UUUU--RUJDAAA.
ZNR UUUUU
O 231701Z JAN 16
FM COMTHIRDFLT
TO ZEN/COMEODGRU ONE
ZEN/CTF 33
ZEN/COMNAVSURFGRU MIDPAC
INFO ZEN/CNO WASHINGTON DC
ZEN/CMC SD WASHINGTON DC
ZEN/CMC WASHINGTON DC
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMPACFLT PEARL HARBOR HI
ZEN/COMNECC LITTLE CREEK VA
ZEN/COMNECCPAC PEARL HARBOR HI
RUJDAAA/COMMARFORPAC
RUJDAAA/COMMARFORPAC ALD
RUJDAAA/COMMARFORPAC G THREE
RUJDAAA/COMMARFORPAC SAFETY
ZEN/COMNAVSEASYSCOM WASHINGTON DC
ZEN/COMNAVSAFECEN NORFOLK VA
RUIIAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CO MCB HAWAII KANEOHE BAY HI
RUJDAAA/CG III MEF
RUJDAAA/CG III MEF G THREE
RUJDAAA/CG FIRST MAW
RUJDAAA/CG FIRST MAW G THREE
RUJDAAA/CG FIRST MAW DOSS
ZEN/COMEODGRU TWO
ZEN/USNS SALVOR
ZEN/MOBDIVSALU ONE
ZEN/EODMU ELEVEN
RUJDAAA/MAG TWO FOUR
RUJDAAA/HMH FOUR SIX THREE
ZEN/COMTHIRDFLT
BT
UNCLAS F O U O
MSGID/ORDER/COMTHIRDFLT/16-009/JAN/
SUBJ/MARFORPAC DIVING-SALVAGE SERVICE REQUEST//
REF/A/DOC/CNO/13 MAY 14//
REF/B/DOC/CNO/11 DEC 07//
REF/C/MSG/MAG-24/202146Z JAN 16//
REF/D/MSG/SECNAV WASHINGTON DC/161750Z MAR 98//
REF/E/MSG/MARFORPAC/210135Z JAN 16//
REF/F/EMAIL/CPF/21 JAN 16//
REF/G/MSG/CPF/230910Z JAN 16//
NARR/REF A IS OPNAVINST 3750.6S, NAVAL AVIATION SAFETY MANAGEMENT
SYSTEM. REF B IS OPNAVINST 4740.2G, SALVAGE AND RECOVERY PROGRAM.
REF C IS MAG-24 SALVAGE REQUEST. REF D IS ALNAV 020/98; DON
SALVAGE POLICY. REF E IS MARFORPAC REQUEST FOR RAPID SALVAGE/
RECOVERY ASSISTANCE. REF F IS COMPACFLT VOCO TO COMMENCE
MOVEMENT OF C3F ASSETS. REF G IS COMPACFLT TASKORD TO SUPPORT
MARFORPAC SALVAGE REQUEST.//
ORDTYP/TASKORD/COMTHIRDFLT//
TIMEZONE/Z//
RMKS/IAW REFS A THRU E AND PER REFS F AND G, THIS IS A C3F TASKORD

ENCLOSURE (185)

DIRECTING EODGRU-1 TO CONDUCT SEARCH AND SALVAGE OF TWO USMC CH-53E AIRCRAFT IVO NORTH SHORE, OAHU, HI AS SOON AS POSSIBLE. THIS ORDER TERMINATES UPON COMPLETION OF RECOVERY AND REDPLOYMENT.//
GENTEXT/SITUATION/
1. SITUATION. AT 15/0835Z JAN 16, TWO USMC CH-53E HELICOPTERS COLLIDED AND CRASHED APPROXIMATELY 1.7 NM NW OF HALIEWA, HI WITH A TOTAL OF 12 PERSONNEL ONBOARD. BOTH COCKPITS WERE FOUND APPROX. 3NM OFFSHORE AT A DEPTH OF 278FSW. DEBRIS FIELD RANGES FROM 270-340FSW.//
GENTEXT/MISSION/
2. MISSION. IAW REF E AND G, COMPACFLT PROVIDES SALVAGE SUPPORT OF AIRCRAFT WRECKAGE RECOVERY AND RELOCATION TO MCAS KANEOHE BAY.//
GENTEXT/EXECUTION/
3. EXECUTION.
3.A. COMMANDERS INTENT.
3.A.1. PURPOSE: TO EXECUTE SALVAGE OF 2XCH-53E AIRCRAFT IVO NORTH SHORE, OAHU.
3.A.2. METHOD: DEPLOY FORCES AND CONDUCT RECOVERY OF AIRCRAFT AND REMAINS.
3.A.3. END STATE: AIRCRAFT ARE RECOVERED AND ANY REMAINS ARE REPATRIATED AND FORCES ARE REDEPLOYED.
4. TASKS.
4.A. EODGRU-1.
4.A.1. PROVIDE DIVE AND SALVAGE ELEMENT CAPABLE OF CONDUCTING SUSTAINED SALVAGE OPERATIONS ABOARD USNS SALVOR IAW REFS E AND G.
4.A.2. DEPLOY FORCES AND EQUIPMENT TO EXECUTE SALVAGE OPERATIONS.
4.A.3. COORDINATE MOVEMENT OF FLY-AWAY MIX GAS SYSTEM (FMGS) IN KEY WEST, FL TO HI IN MOST EXPEDITIOUS MANNER.
4.A.3.A. COORDINATE WITH CTF-33/USNS SALVOR FOR INSTALL AND OPTEST FMGS ONBOARD USNS SALVOR UPON RECEIPT IN HI.
4.A.4. EXECUTE MOVEMENT OF DIVING PERSONNEL FROM SAN DIEGO.
4.A.5. COORDINATE WITH MARFORPAC/ AIRCRAFT MISHAP BOARD (AMB) FOR OFFLOAD AND/OR HAND OFF OF RECOVERED AIRCRAFT MATERIAL.
4.A.5.A. PLAN FOR MULTIPLE OFFLOADING OF RECOVERED MATERIAL DUE TO THE LIMITATION OF DECK SPACE AND SIZE OF ITEMS RECOVERED. SEE PLANNING CONSIDERATIONS.
4.A.6. PROVIDE CONOPS TO C3F FWO NLT 0900PST 25JAN16 TO INCLUDE TIMELINE OF OPERATIONS, C2, ORM AND CONCERNS OR ISSUES. INCLUDE C3F N35 POC IN DISTRIBUTION.
4.A.7. REDEPLOY UPON COMPLETION OF SALVAGE OPERATIONS.
4.B. CTF-33.
4.B.1. SOURCE AND PROVIDE USNS SALVOR (ARS) TO SUPPORT EODGRU-1/MDSU-1 SALVAGE EFFORTS FOR DURATION OF MISSION.
2.B.2. COORDINATE WITH EODGRU-1/MDSU TO ENSURE FMGS IS LOADED, INSTALLED AND OPTESTED PRIOR TO SALVAGE OPERATIONS.
4.C. COMNAVSURFGRUMIDPAC
4.C.1. SUPPORT EODGRU-1/MDSU-1 SALVAGE EFFORTS WITH CHAPLAIN SUPPORT AS NEEDED. COORDINATE WITH EODGRU-1 TO DETERMINE NECESSITY AND PLAN.
5. PLANNING GUIDANCE
5.A. AIRCRAFT INFORMATION, HAZARDS AND SPECIFICATION ARE IAW REF E AND G.
5.B. TRANSIT TIME INTO PEARL HARBOR PORT FOR USNS SALVOR IS APPROXIMATELY 8HRS FROM OPERATION SITE. COORDINATION TO HAVE UNDERWAY BARGE ASSIST WOULD REDUCE TURNAROUND TIME IF POSSIBLE.
5.B.1. CPF IS COORDINATING WITH PACOM AND USARPAC FOR POSSIBLE ARMY LCU SUPPORT IOT ASSIST WITH OFFLOAD OF RECOVERED AIRCRAFT ITEMS UNDERWAY.
6. COORDINATING INSTRUCTIONS.
6.A. ENVIRONMENTAL CONCERNS: MAKE ALL REASONABLE EFFORTS TO AVOID ADVERSE IMPACTS TO CORAL AND MARINE LIFE.
6.B. COORDINATE WITH C3F METOC TO ASSIST WITH WEATHER FORECASTING AND MODELING NECESSARY FOR PLANNING AND DETERMINING

OPERATIONAL IMPACTS.
6.C. COORDINATE WITH MARFORPAC POC TO IDENTIFY NAVAL SAFETY CENTER MEDICAL EXAMINER SUPPORT FOR POSSIBLE RECOVERY OF REMAINS AND FOR INSTRUCTION ON PROCESS OF RECOVERY.
6.D. AMB WILL IDENTIFY AND PRIORITIZE AIRCRAFT WRECKAGE PARTS FOR SALVAGE TO THE ON-SCENE/SHIP COMMANDER WITH SAFETY BEING PARAMOUNT DURING ENTIRE SALVAGE EFFORT. EFFORTS WILL BE MADE TO RECOVER REMAINS INCIDENTAL TO SALVAGE OPERATIONS.
6.E. DURATION. APPROXIMATELY 21 DAYS.
6.E.1. DIVING AND SALVAGE OPERATIONS ARE SEVERELY AFFECTED BY INCLEMENT WEATHER, SPECIFICALLY SEA STATE AND CURRENTS. VARIOUS SEARCH, DIVE AND RECOVERY OPERATIONS HAVE DIFFERENT NO-GO CRITERIA AND SHOULD BE CONSIDERED AS IT MAY AFFECT THE OVERALL TIMELINE. TIMELINE FOR RECOVERY WILL ALSO BE AFFECTED BASED ON THE EXTENT OF WRECKAGE BEING RECOVERED AS REQUESTED BY CONTROLLING CUSTODIAN.
6.E.2. NOTIFY C3F FWO OF UNFORESEEN DELAYS IN THE SALVAGE OPERATIONS VIA THE DAILY REPORTS.
6.E.3. MISSION COMPLETION AS DETERMINED BY MARFORPAC, COMPACFLT AND COMTHIRDFLT.
6.F. IN THE EVENT THE NEED FOR ANY ADDITIONAL OUTSIDE ASSISTANCE IS REQUIRED, ENSURE C3F N35 POC AND C3F FWO ARE NOTIFIED IMMEDIATELY.
6.G. DIRLAUTH ALCON. EODGRU-1/MDSU-1 DIRLAUTH USMC AND OTHER SUPPORTING ENTITIES AS REQUIRED. KEEP C3F FWO AND C3F N35 POC INFORMED.
7. PUBLIC AFFAIRS (PA).
7.A. PA POSTURE IS PASSIVE. REFER QUERIES TO MFP PA AT COMM 808-477-8308.
7.B. MARFORPAC POC IS (b)(6) (b) (3) 10 USC § 130b,
EMAIL: (b)(6) (b) (3) 10 USC § 130b
7.C. COORDINATE RECOVERY TIMELINES WITH ON-SCENE INVESTIGATION TEAM FROM THE NAVAL SAFETY CENTER.//
GENTEXT/ADMIN AND LOGISTICS/
8. ON SCENE COMMANDER (MDSU-1) IS DIRECTED TO PROVIDE DAILY UPDATE TO C3F FWO NLT 1400Z VIA EMAIL WHILE SALVAGE OPS ARE ON GOING, END OF DAY OP SUMMARY IS SUFFICIENT. ENSURE C3F N35 POC IS CC ON REPORT.
9. FUNDING. FUNDING GUIDANCE TO BE PROVIDED SEPCOR. CAPTURE ALL COSTS ASSOCIATED WITH THIS OPERATION.
10.A. SUBMIT REQUESTS FOR SUPPORT TO CPF FOR ADDITIONAL SALVAGE ASSETS (E.G. HEAVYLIFT, BARGES, ETC). KEEP C3F POC INFORMED.
10.B. COORDINATE LNO EXCHANGE AS REQUIRED.//
GENTEXT/COMMAND AND SIGNAL/
10. COMMAND RELATIONSHIPS. MARFORPAC IS THE CONTROLLING CUSTODIAN FOR OPERATION AND IS THE SUPPORTED COMPONENT COMMANDER. COMPACFLT IS THE SUPPORTING COMPONENT COMMANDER, COMTHIRDFLT IS THE SUPPORTING OPERATIONAL COMMANDER, MOBILE DIVE AND SALVAGE UNIT ONE IS THE ON SCENE COMMANDER FOR SALVAGE OPERATIONS.
11. POINTS OF CONTACT:
11.A. C3F:
11.A.1. FLEET WATCH OFFICER/COMM: 619-524-9534/
EMAIL: C3F_FWO.FCT(AT)NAVY.(SMIL.)MIL

(b)(6) (b) (3) 10 USC § 130b

11.B.1. BATTLE WATCH CAPTAIN/COMM: 808-474-5452/
EMAIL: CPF.CATBWC(AT)NAVY.(SMIL.)MIL.

(b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

11.C. CTF-33

(b)(6) (b) (3) 10 USC § 130b

11.D. AVIATION MISHAP BOARD:

(b)(6) (b) (3) 10 USC § 130b

11.E. MARFORPAC:

(b)(6) (b) (3) 10 USC § 130b

11.F. NAVAL SAFETY CENTER:

(b)(6) (b) (3) 10 USC § 130b

BT
#3901
C50F

NNNN
Received from AUTODIN 231706Z Jan 16

Pages 213 through 220 redacted for the following reasons:
- -
NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT http://www.navsea.navy.mil/Contact/FOIA/

Search, Recovery, and Salvage Update

AMB Non-Privileged Summary

04 Apr 2016

(b)(6) (b) (3) 10 USC § 130b

Senior Member HMH-463 AMB

HMH-463 Search/Recovery Effort
AMB Non-Privileged Summary

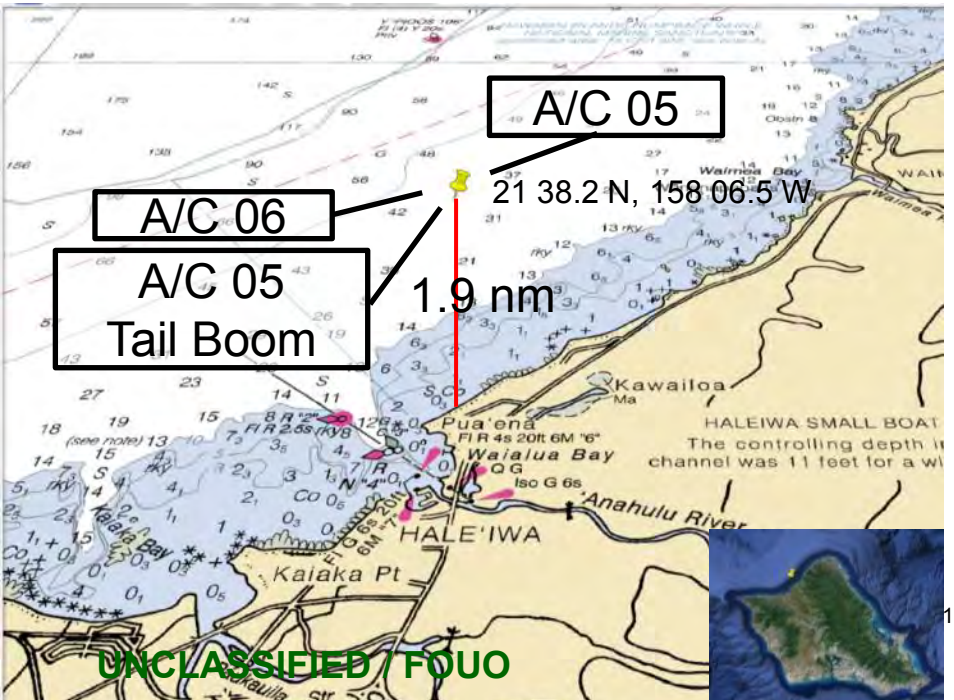
04 Apr 2016

Orientation:

-3 debris fields located within ~ 150 m of the center grid.

-All items, except one partial blade, are located deeper than 300'.

-The Deep Drone 8000 , USNS Salvor, and MDSU-1 provided by NAVSEA and C3F have recovered the majority of the large sections of interest and HR from both Mishap A/C leading to the positive DNA identification of 9 aircrew and 2 additional aircrew (11 of 12) via flight equipment. We are reasonably sure of what happened, but are awaiting the results from multiple Engineering Investigations to determine/eliminate multiple possible causal (why) factors for the midair.



BLUF: Every priority item previously identified via underwater photo is recovered. The primary focus has shifted to recovery. 9 Marines have been identified via DNA. 2 of the remaining 3 have been identified via serialized flight equipment.

-We completed a search (1-2 April) of site 028 associated with PS32. This is the aircraft our last unidentified Marine was on. We recovered several items of debris we suspected of containing HR, but nothing containing DNA was recovered. We recovered one item of clothing (men's boxer shorts). The expanded search area discovered nothing significant for this report.

- All items at site 028 were either retrieved or stacked underwater following a full search by the team. This included sifting through the sand IVO the items.

-An expanded search was conducted 2 April with a sonar scan and visual search from the centralized debris field of site 028 and moved towards site 019 (the primary debris fields). Several small items were identified and searched. All items observed were spread out and no bigger than about 6 inches. Nothing was recovered during this search as the winds increased beyond the safe operational limits of the drone and exceeded the ship's station keeping capability.

- The expanded search continued on 3 April where it left off the previous day using the same methods as site 028. No HR was recovered, but one flight suit and one T-Shirt were recovered along with the debris IVO the recovered personal items.

-We discontinued the search following the recovery of items when the winds and currents exceeded operational limits.

HMH-463 Search/Recovery Effort AMB Non-Privileged Summary

04 Apr 2016

Purpose: The purpose of the AMB is to investigate the Mishap, determine causal factors(why it happened), and provide recommendations IOT prevent reoccurrence.

TIME LINE: Mishap at ~2235 on 14 Jan 2016

~2310 first USN assets arrive with HPD, HFD, Life Guard, and USCG (Search is primary effort until 21 Jan / Memorial, Transition to Salvage and Recovery)

-MDSU-1, USNS Salvor tasked to provide salvage recovery operations until relieved the first week of Feb by NAVSEA deep water capability. USNS Salvor remained the primary platform for operations. Deep water capability requested on 18 Jan via PHONCON and officially on 21 Jan, approved 02 Feb with NAVSEA and Deep Drone 8000 tasked.

-USNS Salvor conducted 7 sorties for 30 at days at sea, to include operations at the limits of their safety capability. They were unable to conduct active salvage on 3 of the sorties due to weather, damage to the ship and injuries sustained to her crew. They were down for maint for 14 days, 4 with good weather

-Debris and HR were collected throughout the Search / Salvage / Recovery effort from the surface, ocean floor and beaches on Oahu and Kauai

-27 Mar, Main Effort switched from salvage to recovery ops

-03 Apr, recovery operations suspended due to all known areas of debris being exhausted.

-On 3 April, recommended cessation of recovery operations believing the search area exhausted and all reasonable efforts to find and recover our Marines has been executed.

-The detailed search included Sites 028/019 and along the flight path to the minimum operational depth of the ROV ~200'. Search graphics are included in slide deck.

Major Items Recovered (All Previous Dives):

- C/P recovered both A/C / partial instrument panels
- HR and personal gear (flight suits, vests, helmets)
- Sections from both A/C left / right / Nose E-Bays
- Deck sections, Ramp (1)
- Partial Comm systems / GPWS x2
- Gear Boxes (missing 1 AGB and 1 NGB)
- Broom Closets (AFCS Servos)
- Pilot/Crew Chief Seats (missing 1 Crew Chief)
- Tail booms with Quick Disconnects
- 6 of 6 engines
- Main Rotor Blades (MRB) (~ 130' of 440') / Tail Rotor Blades
- 4 Life Rafts

-GPWS/IMDS provide flight data recording, closet items to a "Black Box" without voice recording

-The Naval Safety Center analysis of the wreckage supports a midair collision with an impact in excess of 100g.

-No identified any aircraft anomalies believed causal to the mishap have been Identified.

It is assumed, due to the environment and time that the complete recovery of HR and the salvage is not possible.

Items Recovered on 01-03 April:

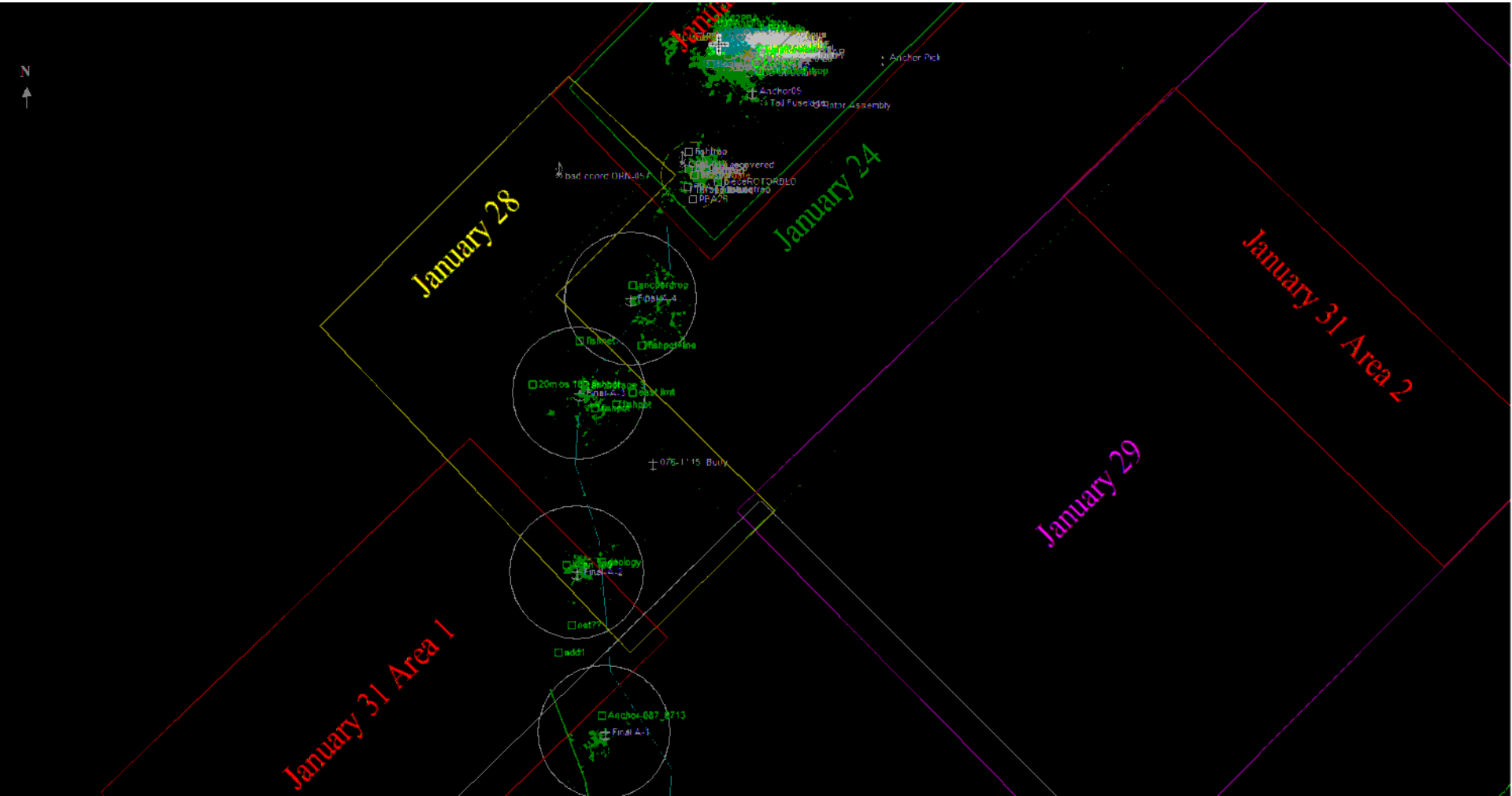
-1 item personal clothing (men's boxer shorts)

-1 Flight Suit, 1 T-Shirt

-1 Eng, 2 sec floor boards, 3 passenger seats, 1 Drive Shaft

NAVSEA Overall Search

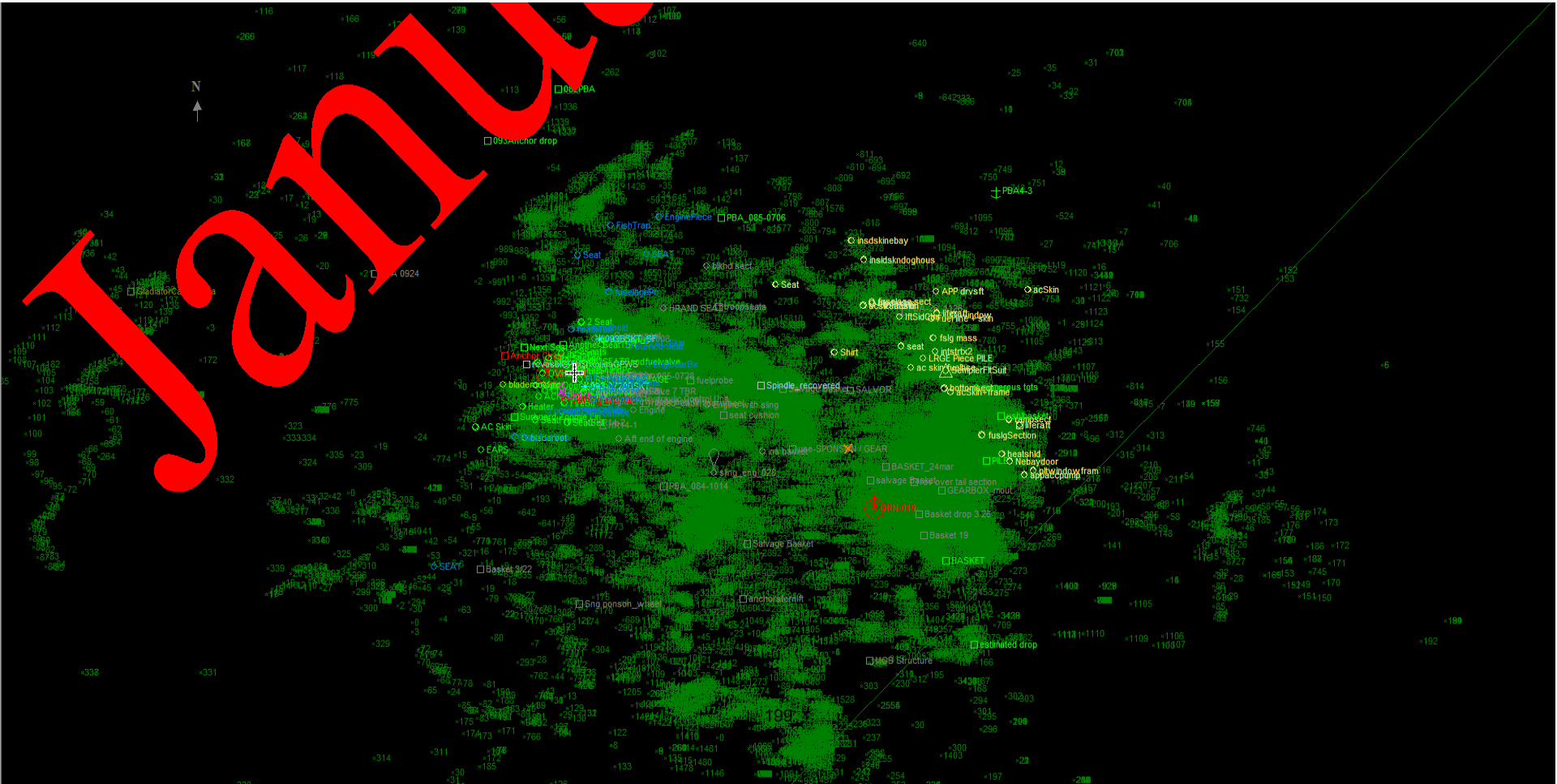
This slide depicts the searches along the flight path and the 3 primary recovery sites, from south to north with north at the top of the graphic. The Tail section and Sites 028 and 019 are north. The system is limited to 600 markers per graphic. All marks are either items (HR or debris) recovered or locations of a search of at least 7 seconds.



Sites 028 and 019

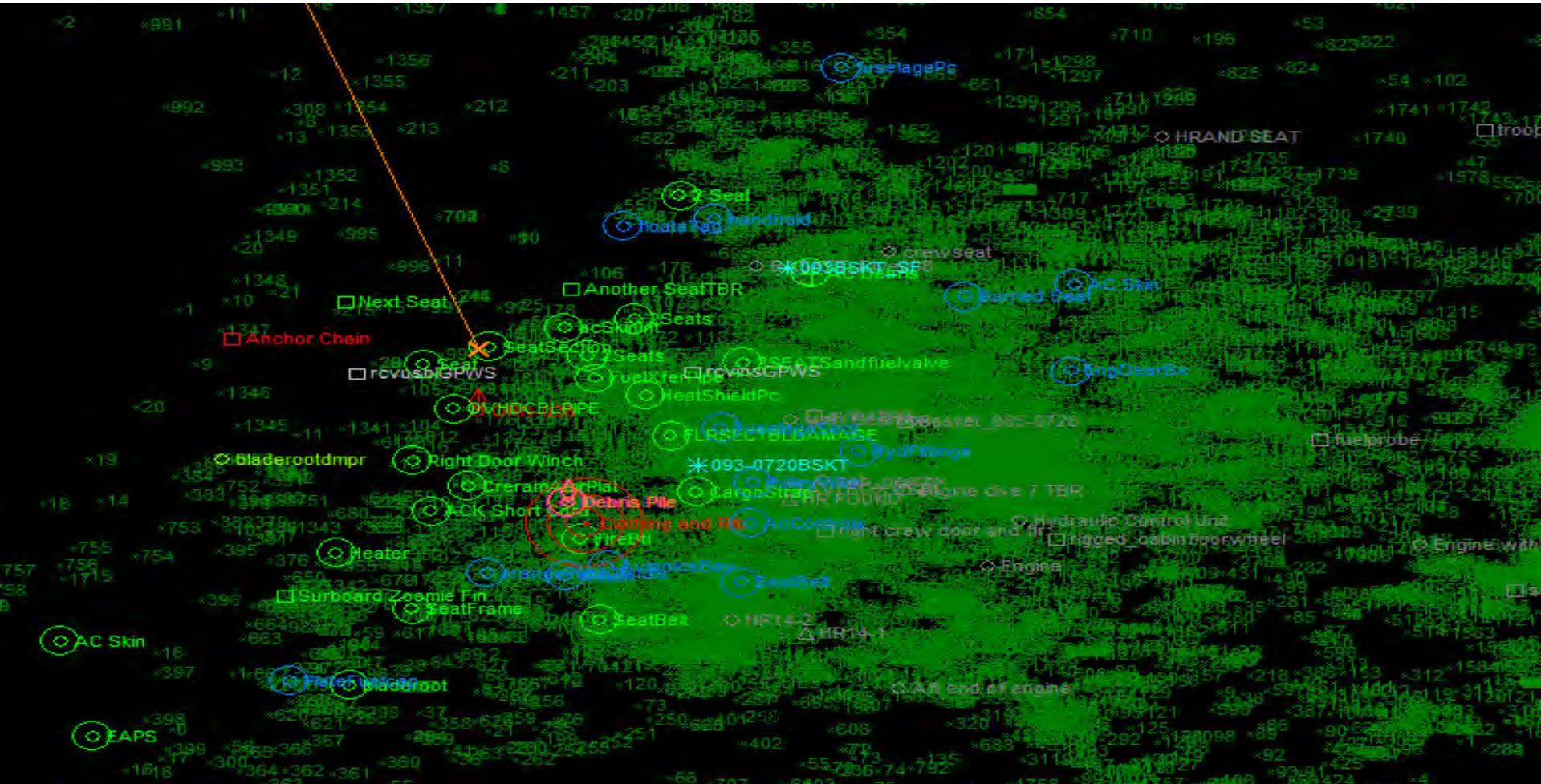
(All Searches 1-3 April)

Key: Dark Green – All ROV stops and searches during USNS Slavor Sortie 1-3 April
Blue – Items recovered on 02 April
Light Green – All previous recovered items
Yellow – Items search / recovered 03 April



NAVSEA Site 028 / A/C 05

Key: Dark Green – All ROV stops and searches during USNS Salvor Sortie 1-3 April
Blue – Items recovered on 02 April
Light Green – All previous recovered items
Yellow – Items search / recovered 03 April



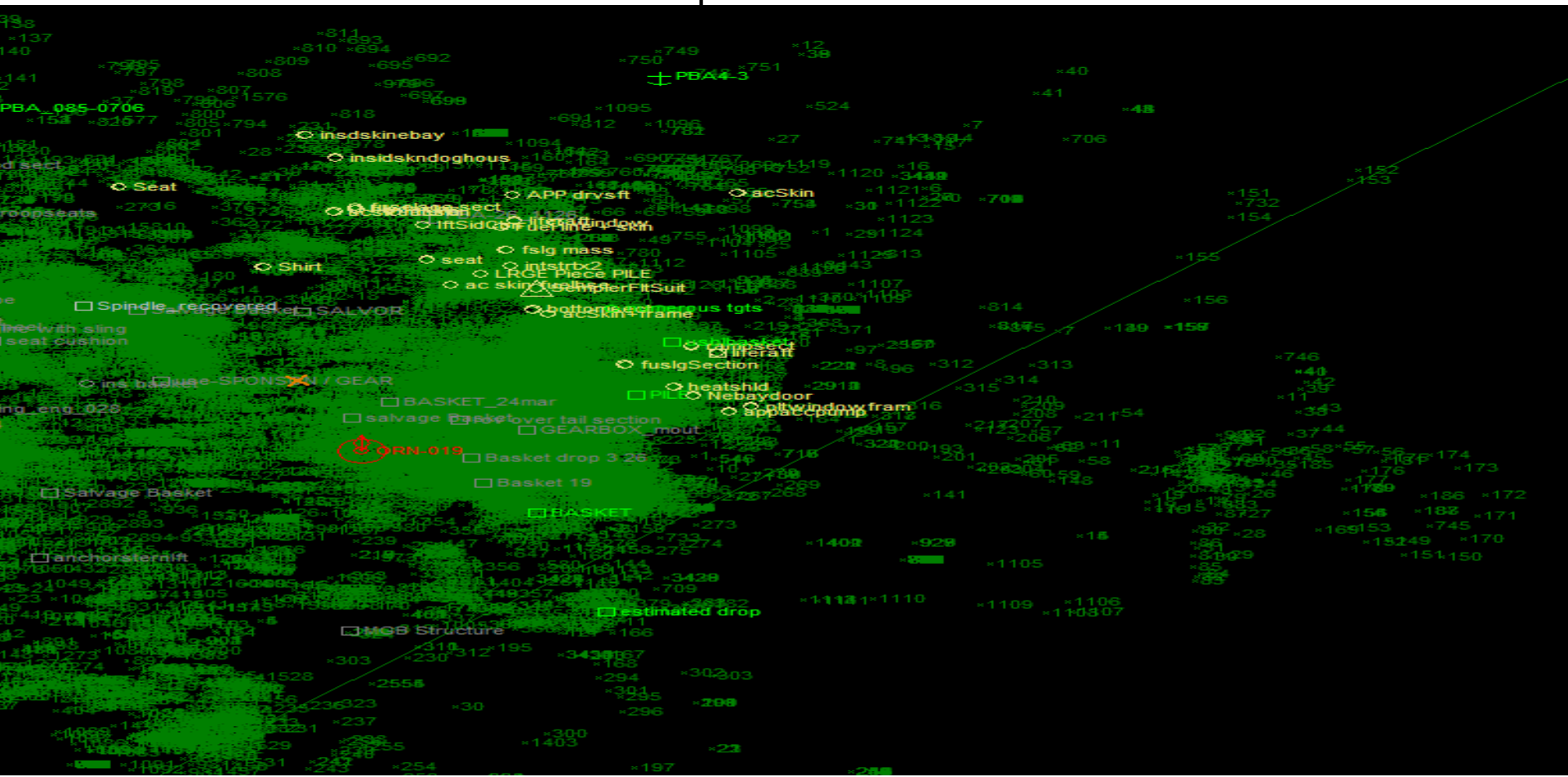
NAVSEA Site 019 / A/C 06

Key: Dark Green – All ROV stops and searches during USNS Salvor Sortie 1-3 April

Blue – Items recovered on 02 April

Light Green – All previous searched / recovered items

Yellow – Items search / recovered 03 April



AMB Hangar

A/C 06

- Cockpit Section
- Engines
- Bulkhead
- MGB and Blades
- Transition section and Gear
- Drive Shafts
- Tail Section










SURE


SURE
SURE



AMB Hangar

A/C 05

- Cockpit Section
- Cabin Deck Sections
- MGB and Blades
- Engines and Gearboxes
- Life Rafts
- Tail Section
- First Responder Recovery














FIRE LANE

AMB Hangar

Centerline

- Triwalls full with small to medium (less than 4 feet) items recovered on final dive 26-27 March (4)
- Ramp and Cabin Door
- TGB (05) and Main Rotor Blades (not matched to A/C)
- TGB (06)


SURE-Pak
SURE-Pak


SURE-Pak


019



Questions

Summary of Interview

Brigadier General Russel A. Sanborn, USMC
Commanding General, 1st Marine Aircraft Wing

with

(b)(6) (b) (3) 10 USC § 130b
Aircraft Logistics Department, 1st Marine Aircraft Wing

19 & 20 April 2016
Okinawa, Hawaii

As soon as General Sanborn (CG) took command of 1st MAW on 30 July 2015, he had to immediately concentrate on Ulchi Freedom Guardian (UFG). And then, the Aviation Maintenance Inspection (ALMAT) results came out right after that. The ALMAT was a failure, the worst one (b)(6) (b) (3) 10 USC § 130b had seen in 2.5 years at 1st MAW. (b)(6) (b) (3) 10 USC § 130b recommended that the squadron be shut down until they get it fixed. The general ordered the squadron be grounded until the programs were fixed. This was to make sure none of the programs jeopardized safety.

Command Naval Air Forces inspectors (CNAF) grades pretty easily. If they don't smell blood, they move on.

CG told) (3) 10 U (Last Name?), "I need leadership because you represent the Wing."

CG asked for the following criteria during the re-inspection: low readiness and management. The Marine Aviation and Logistics (MALS) 24 re-inspected first to see if the minimum requirements were met and they were ready for our re-inspection.

At that time, the Marine Aircraft Group (MAG) 24 had been trying to help increase HMH 463's readiness for over a year. The CG required (b)(6) (b) (3) 10 USC § 130, MAG 24 CO, to send daily email updates on what they were doing to increase readiness.

The CG did not see the cultural workshop results.

The ALMAT inspection team was at HMH 463 for one week. There were SNCO supervision problems. For example, SNCOs were not on the flight line during aircraft launches or during maintenance checks.

HMH 463 probably felt the heavy hand of the wing trying to fix management issues. CG didn't want to make arbitrary decisions, but was trying to get the MAG CO to talk to the Squadron CO and make the necessary changes but nothing was getting pinpointed.

In September 2015, the CG visited HMH 463 and talked with) (3) 10 US , (b)(6), (b)(3). This was 2 weeks after the inspection failure. The CG

ENCLOSURE(188)

toured the squadron and the wanted to know how the squadron planned to "get healthy" after the inspection failure. CG's attitude was to support the squadron, be their cheerleader. Conversation with b) (3) 10 US , (b)(6), (b)(3) was, "What's your plan to get better? (b)(6) (b) (3) 10 USC § 130b the CG—everybody is here to help." CG told (b)(6) (b) (3) 10 USC § 130b that he had a blank check from the CG: if people need to be moved, CG will help move them out the squadron. There may be a cancer of 4-5 people in the squadron. People might not be in the right billets. You might have a sharp SNCO in the airframes who is a sharp supervisor but he needs to be moved to Q&A or to maintenance control. You might have the right person but in the wrong billet. Or maybe a SNCO is technically proficient but can't lead. Or maybe he's not very technically proficient but can lead, be in charge. CG told b) (3) 10 US , (b)(6), (b)(3) he needs to make the necessary changes.

While touring HMH 463, CG noticed two Marine Quality Assurance Representatives (QAR) for the squadron not coming to attention when he entered their workspace. He was told that one was retiring and one was retiring or PCSing in the next six months. His impression of them was that they had already "dropped their packs." Someone told CG that they talked a lot about their long range personal plans after the military but did not seem focused on their jobs.

Everybody on Kaneohe Bay wants to have a change of command ceremony on the flight line, which means nobody can fly that day. There are route problems. Wash racks is problem with how the base is laid out. But these common complaints are that problematic.

There was (b)(6) (b) (3) 10 USC § 130 and the maintenance/Operations contract.

(b)(6) (b) (3) 10 USC § 130: There are 2 hour trends from ALD perspective. You must have goals, make it clear where the bar is, and don't set goals that are too lofty. You need weekly goals.

On 10 October, (b)(6) (b) (3) 10 USC § 130 wrote a "best practices" guide based on success of 462 and one other squadron. This guide was passed to all squadron Cos in November. In early September, RBA was CG's main focus. Poor results from HMH 463. 6 RBA was supposed to go to 8 RBA, but instead it slid.

In November, CG was emailed.

(b)(6) (b) (3) 10 USC § 130: The squadron was operations focused. They needed to increase the number of RBA before pursuing operations so aggressively. There an Operations/Maintenance balance. In 463, 57 maintenance man-hours are spent for every hour of flight time. That's twice the average for aviation. And when you're not flying, that causes even more maintenance challenges and the ratio increases even more.

(b)(6) (b) (3) 10 USC § 130: My thoughts on (b)(6) (b) (3) 10 USC § 130b are all from second-hand sources. But I was told by multiple people that he never comes down to the hangar deck. Ever.

(b)(6) (b) (3) 10 USC § 130b was relieved because the CG lost confidence in his ability to improve readiness. With the new CO, (b)(6) (b) (3) 10 USC § 130b, look at the differences: people were moved, RBA is up, flight hours are up, pilots are getting sent to WTI, the 31st MEU, etc. (b)(6) (b) (3) 10 USC § 130b created and executed a "get well" plan with a "crawl, walk, run" approach. In December 2015, RBA was 1-something. In February and March, it was between 3 and 5, about 4. The improvement is more than 100%.

(b)(6) (b) (3) 10 USC § 130: the CG wanted to work through his commanders like (3) 10 , (b)(6), (b)(3) to figure out what was wrong instead of relying on the ALMAT.

Nothing happened in December 2015. RBA remained low. By 6 January 2016, I was done [with (b)(6) (b) (3) 10 USC § 130b].

What about TFR in December? TFR is not related to RBA. There was basically zero improvement in RBA in January.

(b)(6) (b) (3) 10 USC § 130: We wanted the MAG Co and the Sqdrn CO to find the deficiencies. You had 5 SNCOs sitting behind computers and not fully engaging. This springs from the mentality that the ALMAT inspection is a "smoke/hold" event.

Gen Sanborn: I did not know that 11 pilots held instrument waivers at the time of the mishap. That is troubling. When (b)(6) (b) (3) 10 USC § 130b was CO, I told him that I would call 3d MAW and arrange for his pilots to go TAD somewhere if they need more flight hours. I even offered to pay for it. I got no response. I also told him I would help with any supply or manpower problems. If the pilots were sitting idle, he should have sent them TAD. I also offered the same support to b) (3) 10 US , (b)(6), (b)(3), but he is pursuing other solutions.

They should have pursued "touch and go," basic training exercises instead of 4 hour missions. Hindsight is 20/20.

On 6 January, (b)(6) (b) (3) 10 USC § 130b was completely on board with the relief of (b)(6) (b) (3) 10 USC § 130b. I would have pulled the trigger sooner too, but (b) (3) 10 USC asked for 30 days to give (b)(6) (b) (3) 10 USC § 130b another opportunity to make some changes.

I didn't want to be the 8,000 mile screwdriver. I wanted to do the heavy lifting and get through higher-level barriers so that b) (3) 10 US , (b)(6), (b)(3) could make changes at the squadron level. But he didn't come up with a plan or make the changes.

(b)(6) (b) (3) 10 USC § 130b asked for time. In September, there was the failed inspection. I wanted to relieve (b)(6) (b) (3) 10 USC § 130b in November, but b) (3) 10 US (b)(6), (b)(3) asked for 30 days to see if the CO could make changes.

The relief was very orchestrated. On 12 January at 0800, I relieved (b)(6) (b) (3) 10 USC § 130b was coming on board 24 hours later. He came without his wife.

When I relieved (b)(6) (b) (3) 10 USC § 130b, he asked if he could go talk to the squadron. I said no. He was no longer the CO. The XO was in charge until (b)(6) (b) (3) 10 USC § 130b could get there. The XO took charge at 0801 on 12 January. There was no formal change of command.

(b)(6) (b) (3) 10 USC § 130b took charge on the day of the mishap. The XO would have signed the mishap daily flight schedule. I didn't know that the squadron had scheduled an incoming CO brief between the mishap flight brief and the mishap mission.

I met the new CO in the BOQ for 2-3 hours around the time of the relief. I recommend to (b)(6) (b) (3) 10 USC § 130b that he observe the squadron for 30 days and not make any drastic changes. Observe the command climate, who is part of the cancer, who is in charge. Set short term goals and celebrate the little victories. Don't try to turn things around overnight. Maybe a few months from now, you can "fly the barn" [fly all aircraft in the squadron] to celebrate higher RBA.

After I relieved (b)(6) (b) (3) 10 USC § 130b, I spoke with the entire squadron, all-hands. I told them, I relieved your CO. I was the first CG to relieve a squadron commanders for readiness. We are a "fight tonight" MEF. We are supposed to be in the fight with 400 aircraft. I can't show 15 aircraft short because of HMH 463 and say hey, we are all here except for 463. We make mission. And the CO is ultimately responsible for everything the squadron does and fails to do. You let your squadron CO down. You need to look in the mirror and ask yourself, did you contribute positively, negatively, or did you remain neutral? Don't say, "Woe is me." This is an opportunity to be a phoenix and rise from the ashes.

I conversed with (b)(6), (b)(3) too.

At 1700 the following day, I met with (b)(6) (b) (3) 10 USC § 130b I told him [NAFTA], that he was hitting it out of the park. He had 3-4 RBA every day and he had the best people in charge who had the best focus. (b)(6) (b) (3) 10 USC § 130b did send his best to MRF-D 2015 with the best airframers and Q&A. He cherry picked but didn't address the cancer.

The big question is should we have taken a knee when the CO was relieved. In hind sight, the squadron was pursuing high-level codes and was not focused on safety.

In November 2015, I thought—how long am I willing to sleep on whether to relieve (b)(6) (b) (3) 10 USC § 130b? I told General Davis at the time that, by relieving this CO, I think I'm going to prevent a mishap.

There was nothing abnormal about the squadron's plans for the days following the mishap. 12 January, the CO was relieved. On 13

January, there was a night gun shoot and a NATOPS check. The XO signed the planned. 14 January was the mishap.

In hind sight, they should not have had an all-hands CO brief between the flight brief and the flight. We used to have a policy: "once you shoot the brief, you're done."

(b)(6) (b) (3) 10 USC § 130: There were a lot of indicators that something was wrong. During the inspection, Marines were rolling their eyes, making comments, enlisted Marines were talking back to Chief Warrant Officers, and they were doing that during the inspection in front of the Marines conducting the inspections.

CG: I did not tell anyone to "drive on" or give specific guidance like that around the time of the relief.

In (b)(6) (b) (3) 10 USC § 130b mind, the issue was readiness. Safety is always a concern but it wasn't a cause for concern. The mishap flight had a stacked deck, they had WTIs and it was only two aircraft. In hind sight, there were safety implications because of flight hours. They didn't fail anything safety-wise during the ALMAT.

--- 24 hour break ---

I had a discussion with (b)(6) (b) (3) 10 USC § 130b after the CO's relief. I told him what I told the CO. I asked him, what did you do at MRF-D? Why were you so successful? You had 3 out of 4 RBA the whole time. The grunts said those guys were hitting it out of the park. Aviation was always available, always able to support. Tell (b)(6) (b) (3) 10 USC § 130b what you did. I asked him about morale and how he got the Marines so motivated in Australia. It might just be easy because they're in Australia and don't mind being hungry or dirty because they're in Australia and it's cool, but what about morale back at the squadron? He told me that he didn't know because he had been away from the squadron for 6 months. And he only had 90 of the 250 people in the squadron, so he didn't know.

I told (b)(6) (b) (3) 10 USC § 130b to send up a weekly sitrep and discuss observations and decision points. I said call me anytime and call (b)(6) (b) (3) 10 USC § 130b anytime. We talked about PCSing, GTCC issues, housing. His wife had some medical issues. I said that I will try to help with any personal issues because I need you to fix the squadron. If you need housing or whatever, let me know. Create a vision, make small steps, improve morale, and celebrate short term victories in pursuit of long term goals. I don't expect instant results. Listen by asking simple questions for the first two weeks. I recommend not making any drastic changes. Figure out how the squadron operates. Keep a journal. Develop a vision, then advertize and promote it. Find 4 or 5 officers that have respect within the squadron and let them help you with ideas, observations, and implementation. Break the glass, but

don't break backs. Find the cancer and make the necessary changes. Let them know that you are their CO, not their friend, but their CO.

I had a similar conversation with the XO.

(b)(6) (b) (3) 10 USC § 130b handled the aftermath of the mishap as best he could given that he was entirely new to the squadron. One parent asked him, "Did you know my son?" He said, "No ma'am, I just took command. I did not know your son personally, but I knew your son as a Marine." I've been very impressed with how he has handled this assignment.

There was no consideration on whether to stand down the squadron after the CO's relief. In hind sight, that would have been a "perfect play." It wasn't an intense scheduled.

If the MAG CO had recommended that the squadron take a knee, I would have agreed. The CO was relieved for readiness but safety is always a concern too.

I wasn't impressed by the follow-on ALMAT inspection.

(b)(6) (b) (3) 10 USC § 130b said he was surprised by the relief. Well, I'm surprised that he was surprised.

I told (b)(6) (b) (3) 10 USC § 130 after the inspection failure to let (b)(6) (b) (3) 10 USC § 130b know that his job is on the line. I know this is the first time a CG has addressed readiness this hard.

My number one intent is to make mission.

I understand that readiness is a challenge throughout the 53 community, but HMH 463 stood out. They failed to meet standards. I understood that they had some challenges. The bulletins were a challenge. But they were not up to the minimum standards and were lower than the other 7 squadrons. After the ALMAT failure, I gave (b)(6) (b) (3) 10 USC § 130b over 60 days to fix the problem. The reinspection results demonstrated that not enough was done to fix the squadron.

When he was relieved, (b)(6) (b) (3) 10 USC § 130b told me that the squadron was coming back and was on an uptrend. But their RBA was still between 1 and 2, with an average of something like 1.7. I told (b)(6) (b) (3) 10 USC § 130b, "Tell me when you asked for me to help you and when I said, 'I can't help you.'"

Maybe he was technically proficient but just was unable to address the culture, the morale problem.

General Davis told the Commandant, "If I can't improve readiness, fire me." It's the same for me. That's why we have RBA reporting.

AFB 346, we need to apply the right resources.

(b)(6) (b) (3) 10 USC § 130b never told me that safety would be jeopardized if a squadron CO is relieved for readiness. It's very hard to cook the books. DRRS and AMSRR make it difficult. It used to be possible, but 2 hour situations are not allowed anymore. The solution is to order he squadron to launch the barn and then ask them why only 2 aircraft went up.

You need to investigation this mishap and rule out all the possibilities that were no factors.

If low flight time was a factor, the question is "How many hours do we need to be safe in the CH-53 cockpit?" One month of no flying might be okay, but if hours are consistently low, they might not be proficient.

One thing I'd like you to address is the difference between the old days, when we didn't have a lot of these collateral duties and we flew 30 hours/month consistently. We still had PFT and rifle qualification and basic Marine training requirements, but over the years, we have dogpiled so much on pilots. Maybe we need to just focus on "blocking and tackling" and concentrate on being professional pilots. Everybody is in a cubicle instead of in the Ready Room. Pilots are inundated with collateral duties. Maybe we need exemptions. SNCOs have a lot of collateral duties too. And the Marines have Lance Corporal Seminar and TAD and FAPs, etc. T/O is not a staffing goal.

I'd like to know what kind of collateral duties the pilots had in the 60 days preceding the mishap. If they were not focused on the flight, I want to know why. Was it because their hearts were not in it, they didn't have enough flight hours, they were not proficient? If you are going for WTI, you need to be learning, reading, focused. The squadron didn't have that focus. They were rusty.

Pages 257 through 258 redacted for the following reasons:
- -
(b)(5)

Marine Corps spokesman 1st Lt. Joseph Butterfield said the investigation into (b) (3) 10 USC removal "will be comprehensive, but it would be inappropriate to speculate on issues covered by the scope of the investigation or the CH-53 aviation mishap board."

The Marine Corps in recent years had 12 CH-53Es at Kaneohe Bay. A 2016-2026 Corps-wide aviation plan reported a decrease in flight hours and an "uptick" in mishap rates.

Marine Corps Commandant Gen. Robert Neller was asked at a Senate subcommittee hearing last month whether budget cuts led to fatal helicopter crashes and put other Marines at risk, Marine Corps Times reported.

Neller said the CH-53 community was probably the "most challenged" in part because of a shortage of aircraft, but said the Corps planned to put more of the choppers through maintenance and make spare parts more available.

The Virginian-Pilot newspaper obtained an internal Marine Corps report, meanwhile, that said commanders were hamstrung by "unacceptably poor readiness" due to parts shortages, maintenance backlogs and years of wear and tear.

By Jan. 17, three days after the unexplained crash of the two CH-53Es 2 miles off Waimea Bay, "minimal" human remains had been recovered. (b) (6) said with one exception, (b) (6) were most of what was subsequently located.

As of March 2, nine Marines had been identified through DNA and other means, but (b) (6)

A Marine Corps message to the family said that as of March 27 the Salvor was "now complete with salvage and recovery operations." Neller, the commandant, subsequently ordered one more sweep, which ended April 4, the Marine Corps said.

(b) (6) would like the Marines to find her son and the two others, but it seems unlikely. Now she has memories of her 6-foot-4, 220-pound son who was a workout "beast" but had a tender heart inside.

"Dillon was our family hero and is missed so dearly," she said in an email. The family started the Sgt. Dillon Semolina Memorial Scholarship Fund at youcaring.com.

"To continue in walking in Dillon's footsteps, as he would want us to do, we are working as a family to have scholarships available to students of Delano High School (in Minnesota)," the Web page states.

The Marine always dreamed of becoming a veterinarian or doctor and planned to get out of the Corps and go to school in Salt Lake City in the fall.

"Unfortunately, those plans have come to an abrupt end, but we are going to keep his name going," the family says on the scholarship site.

http://www.staradvertiser.com/hawaii-news/parents-of-missing-sergeant-blame-marines-for-accident/



"SALVOR set the world's record for open ocean recovery by salvaging a helicopter for a depth of 17,251 feet from waters off Wake Island." "SALVOR has earned an enviable reputation of rapid response to emergencies"

SALVOR OP Plan

USNS SALVOR

- Departed Pearl Harbor: 1330W 17JAN
- ETA to location: 2330W 17JAN
- Mission:
  - locate and identify aircraft wreckage on sea floor, evaluate condition of airframes and support ongoing search for missing crewmembers.
  - Communicate status and brief findings to UC.
  - NOT A SALVAGE MISSION, in support of Search & Rescue.
  - Support platform to MDSU.
- Communication: Primary – Cell, Secondary-VHF. Reports to ICP SITL.
- Safety Plan: Operational Risk Management discussions with ICP.

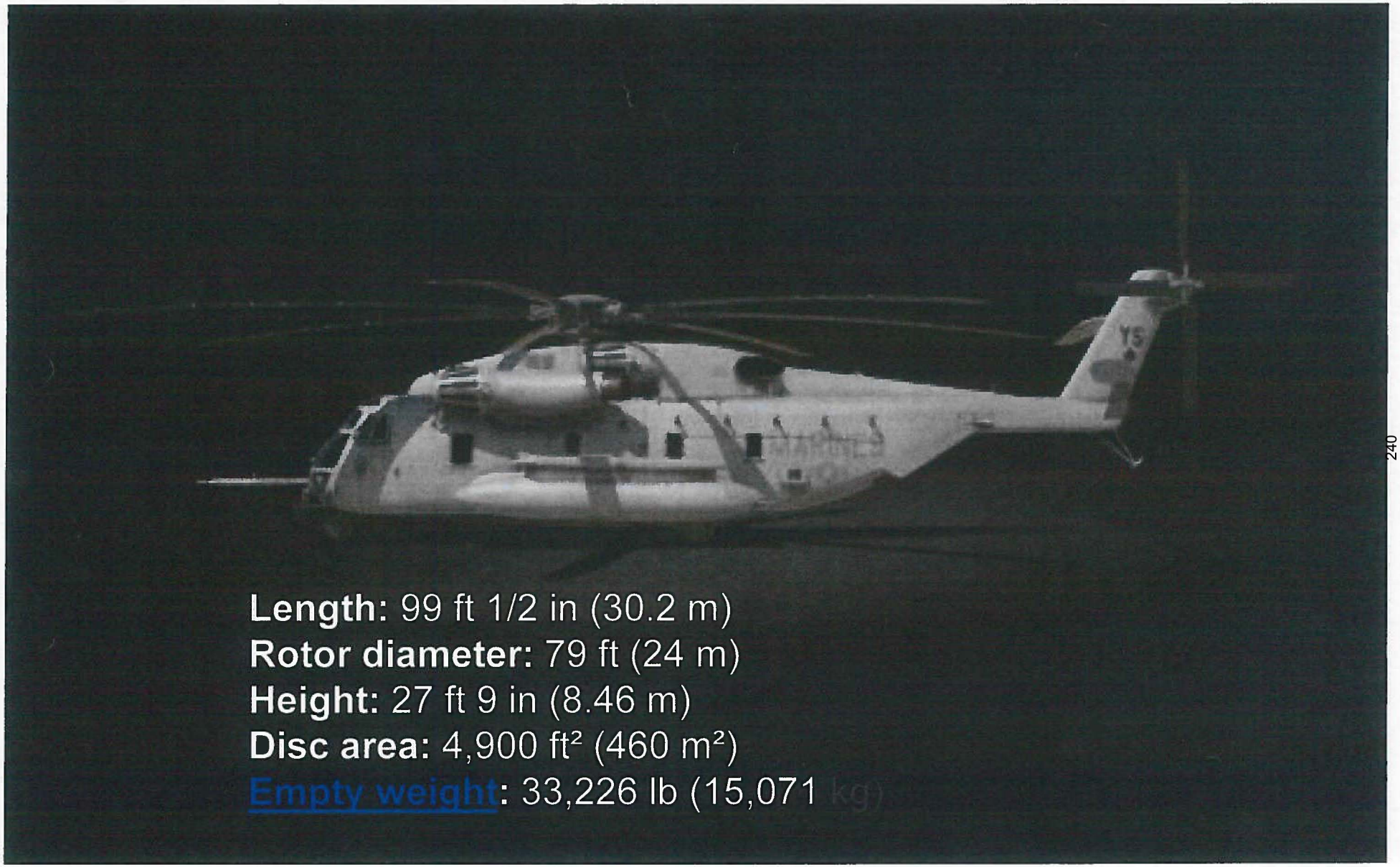
Mobile Diving and Salvage Unit – 1

- Departed Pearl Harbor: 1215W 17JAN
- Arrived Haleiwa: 1330W 17JAN
- Mission:

  One 7 Meter RHIB and one 27FT Boston Whaler will launch from Haleiwa small boat harbor and operate Side Scan Sonar and Remote Operated Vehicle today in support of Search & Rescue efforts.
- Communication: Primary – Cell, Secondary-VHF to Sector Honolulu. Reports to ICP SITL.
- Safety Plan: Operational Risk Management discussions with ICP.

Contacts

(b)(6) (b) (3) 10 USC § 130b



Length: 99 ft 1/2 in (30.2 m)
Rotor diameter: 79 ft (24 m)
Height: 27 ft 9 in (8.46 m)
Disc area: 4,900 ft² (460 m²)
Empty weight: 33,226 lb (15,071 kg)

UNITED STATES MARINE CORPS
1ST MARINE AIRCRAFT WING
UNIT 37101
FPO AP 96603-7101

IN REPLY REFER TO:
4790
MPA/MCI
12 SEP 14

From: Aircraft Maintenance Officer, 1st Marine Aircraft Wing
To: Commanding Officer, Marine Heavy Helicopter Squadron 463
Via: Commanding Officer, Marine Aircraft Group 24

Subj: MAINTENANCE PROGRAM ASSIST/MATERIAL CONDITION INSPECTION RESULTS

Ref: (a) COMNAVAIRFORINST 4790.2B CH-1
(b) WgO 5040.2C

Encl: (1) Aviation Maintenance Inspection Overview
(2) Program Grade Sheet
(3) Drills and Practicals
(4) MCI Report
(5) Computerized Self-Evaluation Checklist (CSEC) Discrepancy Report

1. In accordance with the references, the 1st Marine Aircraft Wing (MAW) Aviation Logistics Management and Training (ALMAT) team conducted a Maintenance Program Assist (MPA) of Marine Heavy Helicopter Squadron 463 (HMH-463) during 8-12 September, 2014.

2. The 1st MAW ALMAT team inspected 39 NAMP programs for compliance with governing directives: 22 programs are graded as "On-Track", seven programs are graded as "Needs More Attention", and 10 programs are graded as "Off-Track". A comprehensive list of discrepancies has been provided to the Maintenance Department.

3. Command attention is required in the following deficient areas:

a. Off-Track Programs:

(1) Aircraft Confined Space Program (ACSP)
(2) Foreign Object Damage Prevention
(3) Tool Control Program
(4) Corrosion Prevention and Control
(5) Hazardous Material Control and Management (HMC&M)
(6) Technical Directive Compliance
(7) Phase Maintenance
(8) Data Analysis
(9) Battery Maintenance Safety
(10) Aviation Life Support System (ALSS)

b. Needs More Attention Programs:

(1) Hydraulic Contamination Control
(2) Quality Assurance Audit
(3) Egress/Explosives System Checkout Program
(4) Aircraft Records and Reports / Engine Accounting
(5) Logs and Records
(6) Material Control
(7) Aircraft Armament Equipment(AAE)

ENCLOSURE ( )
(191)

Subj: MAINTENANCE PROGRAM ASSIST/MATERIAL CONDITION INSPECTION RESULTS

4. In conjunction with the MPA/MCI, 45 contingency response drills and practical proficiency examinations were conducted: 37 are graded as "Satisfactory" and eight are graded as "Unsatisfactory".

5. Command attention is required in the following deficient areas:

a. Unsatisfactory Drills/Practical Applications:

(1) NALCOMIS Contingency
(2) DTPL Audit
(3) Egress Check Out
(4) Fuel Sample
(5) Pre-Op Respirator
(6) Pre-Op Tire Inflator
(7) SMQ Verification
(8) Tire and wheel emergency deflator location

6. The points of contact for further assistance are (b)(6) (b) (3) 10 USC § 130b , (b)(6), (b)(3)

(b)(6), (b)(3)

Copy to:

CO, MAG-24
CO, MALS-24
CO, HMH-463
AMO, HMH-463
QA, HMH-463
ALMAT Inspection Files

WING/MALS - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 3RD QTR CY 2014
09/11/2014
Discrepancy Report, File Copy, Overview
1ST MAW
HMH-463 MPA 8 SEPT - 12 SEPT 2014

Evaluator: 01. , (b)(6), (b)(3)

"Off-Track" - Aircraft Confined Space (ACSP) (1100)

This program was graded "Off-Track" for the following reasons:

- Personnel entering fuel cells without being qualified.

- Personnel issuing permits without being qualified.

- Rescue Plan does not address all necessary requirements.

Evaluator: 02. (6) (b) (3) 10 USC §

"Off-Track" - Foreign Object Damage Prevention (1200)

This program was graded "Off-Track" for the following reasons:

- Multiple portable tool containers contain FOD.

- Multiple consumable lockers are not being tracked.

- Aircraft covers and duct covers not being utilized.

Evaluator: 03. (6) (b) (3) 10 USC §

"Off-Track" - Tool Control (1300)

This program was graded "Off-Track" for the following reasons:

- Security and control is not maintained over tools and equipment.

- Multiple NAVSUP306s not signed by current Work Center Supervisors.

- Multiple semi-annual inventories not completed.

Evaluator: 04. (b)(6) (b) (3) 10 USC § 13

"Off-Track" - Corrosion Prevention and Control (1400)

This program is graded as "Off-Track" due to the following reason:

- Personnel not using required PPE.

- Multiple personnel fit tests documented incorrectly.

- Multiple respirators not documented as inspected/cleaned.

Evaluator: 05. (b)(6) (b) (3) 10 USC § 13

"Off-Track" - Hazardous Material Control & Management (HMC&M) (2200)

This program was graded "Off-Track" for the following reasons:

- HAZWASTE is improperly disposed of.

- MSDS is not available for all HAZMAT.

- Personnel not attending/completing required training.

Evaluator: 06. (6) (b) (3) 10 USC §

"Off-Track" - Technical Directive Compliance (2600)

This program was graded "Off-Track" for the following reasons:

- TD found past compliance date.

- Subsequent verifications not being performed.

Evaluator: 07. (b)(6) (b) (3) 10 USC § 13

"Off-Track" - Phase Maintenance (3400)

This program is graded as "Off-Track" due to the following reason:

- Scheduled maintenance is not documented in SCC.

- Technical Directives are not documented in SCC.

- Explanatory notes are not entered in the SCC.

Evaluator: 08. (b)(6) (b) (3) 10 USC §

"Off-Track" - Data Analysis (3600)

This program was graded "Off-Track" for the following reasons:

- Incomplete data being submitted up-line.

- Training not being performed.

- No contingency plan in place.

Evaluator: 09. (b)(6) (b) (3) 10 USC §

"Off-Track" - Battery Maintenance Safety (4500)

This program was graded "Off-Track" for the following reasons:

- Improper PPE being utilized.

- Exposed terminals not properly insulated.

- Lithium batteries improperly stored.

Evaluator: 10. (b)(6) (b) (3) 10 USC § 130

"Off-Track" - Aviation Life Support Systems (5200)

This program was graded "Off-Track" for the following reasons:

- Survival items not being inspected IAW applicable MIMs.

- Personnel not reviewing ALS from issuing custodian for completeness and accuracy.

- ALS does not contain all information and not maintained properly.

Evaluator: 11. (b)(6) (b) (3) 10 USC § 130

"Needs More Attention (NMA)" - Hydraulic Contamination Control (600)

This program was graded "NMA" for the following reasons:

- Hydraulic Samples are not documented in OOMA and/or not matching hydraulic trend analysis records.

Evaluator: 12. (b)(6) (b) (3) 10 USC § 130

"Needs More Attention (NMA)" - Quality Assurance Audit (800)

This program was graded "NMA" for the following reasons:

- Level of "NMA" and "Off-Track" programs.

- QARs need training to conduct adequate audits.

Evaluator: 13. (b)(6) (b) (3) 10 USC § 130

"Needs More Attention (NMA)" - Egress System Checkout Program (1600)

This Program was graded "NMA" due to the following reasons:

- Program Manager is not following assigned responsibilities.

- Web based training is not completed.

Evaluator: 14. (6) (b) (3) 10 USC § 1

"Needs More Attention (NMA)" - Aircraft Records and Reports/Engine Accounting (3200)

This program was graded "NMA" for the following reason:

- ATO DTG 300616Z JUN 14 identified incorrect Buno for transfer. 3MAW requested modification from TYCOM however, modification from TYCOM via naval message was not received correcting buno.

Evaluator: 15. (6) (b) (3) 10 USC §

"Needs More Attention (NMA)" - Logs & Records (3300)

This program was graded "NMA" for the following reasons:

- Engine Phase inspections schedule is incorrect.

- AESR does not reflect driving replacement due.

- ALSS records not maintained properly.

Evaluator: 16. (b)(6) (b) (3) 10 USC § 130

"Needs More Attention (NMA)" - Material Control (3700)

This program was graded "NMA" for the following reasons:

- Multiple PEBs have items with incorrect counts.

- Priority requisitions not being validated between Material Control and Work Centers.

- Flight Clothing pool inventories incorrect and quarterly inventory/custody cards not updated.

Evaluator: 17. (b) (3) 10 USC

"Needs More Attention (NMA)" - Aircraft Armament Equipment (AAE) (5000)

This program was graded "NMA" for the following reasons:

- Annual reports are not being submitted to TYCOM.

- SRC Cards not maintained properly.

- HER Cards not updated with required material.

WING/MALS - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B

Aviation Maintenance Management Team

ACTIVITY: HMH-463 MPA 8 SEPT - 12 SEPT 2014

Audit Performed on 9/11/2014

Service Type: USMC

Maintenance Level: Organizational

AREA	*PROGRAM*	*GRADE*
200	Maintenance Training Program	On-Track
300	Fuel Surveillance Program	On-Track
400	Navy Oil Analysis (NOAP) Program	On-Track
500	Aviators Breathing Oxygen (ABO) Surveillance Program	Not Applicable
600	Hydraulic Contamination Control Program	Needs More Attention
700	Tire and Wheel Maintenance Safety Program	On-Track
800	Quality Assurance	Needs More Attention
900	Maintenance Department/Division Safety Program	On-Track
1000	Naval Aviation Maintenance Discrepancy Reporting (NAMDRP) Progra	On-Track
1100	Aviation Confined Space Program	Off-Track
1200	Foreign Object Damage (FOD) Prevention Program	Off-Track
1300	Tool Control Program	Off-Track
1400	Corrosion Prevention and Control Program	Off-Track
1500	Plane Captain Qualification Program	On-Track
1600	Egress System Checkout Program	Needs More Attention
1700	Support Equipment Operator Training and Licensing Program	On-Track
1800	Support Equipment Planned Maintenance System Program	On-Track
1900	Central Technical Publications Library (CTPL) Program	On-Track
2000	Naval Aviation Metrology and Calibration Program	On-Track
2200	Hazardous Material Control and Management Program	Off-Track
2400	Electrostatic Discharge (ESD) Program	On-Track
2600	Technical Directive (TD) Compliance Program	Off-Track
2900	Maintenance Control	On-Track
3100	Weight and Balance	On-Track
3200	Aircraft Records and Reports/Engine Accounting	Needs More Attention
3300	Logs and Records	Needs More Attention
3400	Phase Maintenance	Off-Track
3500	Maintenance Administration	Not Applicable
3600	Data Analysis	Off-Track
3700	Material Control	Needs More Attention
3800	Aircraft Maintenance Material Readiness List (AMMRL)	On-Track
3900	Vibration Analysis Program	On-Track
4000	Taxi/Turnup/APU Licensing	On-Track
4500	Battery Maintenance Safety	Off-Track
4600	Aircraft Compass Calibration	On-Track
4700	Laser Hazard Control Program	On-Track

WING/MALS - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B

Aviation Maintenance Management Team

ACTIVITY: HMH-463 MPA 8 SEPT - 12 SEPT 2014

Audit Performed on 9/11/2014

Service Type: USMC

Maintenance Level: Organizational

AREA	*PROGRAM*	*GRADE*
4800	NOMMP AWCAP	On-Track
4900	Explosives Handling Personnel Qualification and Certification Progra	On-Track
5000	Aircraft Armament Equipment (AAE)	Needs More Attention
5200	Aviation Life Support Systems (ALSS)	Off-Track
5300	Oil Consumption Program	Not Applicable
5400	SE Misuse/Abuse Program	On-Track

Summary	*Number of Programs*
On-Track	22
Off-Track	10
Needs More Attention	7
Area of Concern	0
Not Evaluated	0
Not Applicable	3
Total	42

ACTIVITY: HMH-463 MPA 8 SEPT - 12 SEPT 2014

Events Completed on 9/11/2014
Service Type: USMC
Maintenance Level: Organizational

	Drills and Practicals Titles	*GRADE*

DRILLS

1.	HAZMAT Exposure (Eyes)/ Use of MSDS	SAT
2.	HAZMAT Material Spill	SAT
3.	Missing Tool Procedure	SAT
4.	NALCOMIS Contingency	UNSAT
5.	Thermal Runaway	SAT

PRACTICALS

1.	Acceptance of new SE	SAT
2.	Assign Local IMRL Serial Number	SAT
3.	Broken tool reporting	SAT
4.	Conditional Inspection Generation	SAT
5.	DTPL Audit	UNSAT
6.	Egress Check Out	UNSAT
7.	ESD Packaging	SAT
8.	ESD Safe Area	SAT
9.	FCF Brief/Debrief Procedures	SAT
10.	FOD Walk down	SAT
11.	Fuel Sample	UNSAT
12.	HAZMAT check-in/out procedure	SAT
13.	HAZMAT exposed to eyes	SAT
14.	HAZWASTE disposal	SAT
15.	Hydraulic Electronic Particle Counter Sample	SAT
16.	Hydraulic Sample log book verification	SAT
17.	Hydraulic Sample Visual Analysis	SAT
18.	IMRL AirComp	SAT
19.	IMRL status code update	SAT
20.	IMRL transfer	SAT
21.	LAMS BACK-UP	SAT
22.	Maintenance Meeting Procedures	SAT
23.	MSDS locating	SAT
24.	NAT 01 Verification	SAT
25.	Oil Sample	SAT
26.	PODS sample	SAT
27.	Pre-Op A/S32A-45	SAT
28.	Pre-Op Electro Static Discharge (ESD) Mat	SAT
29.	Pre-Op HSU	SAT
30.	Pre-Op MEPP	SAT

	Drills and Practicals Titles	*GRADE*
31.	Pre-Op NAN 4	SAT
32.	Pre-Op Respirator	UNSAT
33.	Pre-Op Sewing Machine	SAT
34.	Pre-Op Tire Inflator	UNSAT
35.	Safe for Flight	SAT
36.	SMQ verification	UNSAT
37.	SRC Verification	SAT
38.	Tire and wheel emergency deflator location	UNSAT
39.	Work Center Quarterly Local Asset Management System (LAMS) Verification	SAT
40.	Workcenter work load report validation	SAT

Summary	*Number of Programs*
SAT	37
UNSAT	8
Total	45

Material Condition Inspection

Aircraft

Nomenclature	Serial	Description	Condition
Aft Cabin Light	161540	Cracked Light Cover	UNSAT
Aft LH	161540	Hydraulic Leak	UNSAT
Aircraft	161540	Excessively Dirty	UNSAT
Batwing L/R	161258	Worn Non-Skid	UNSAT
Batwing L/R	161258	Bare Metal and Corrosion	UNSAT
Batwing L/R	161540	Bare Metal	UNSAT
Cabin Area	161258	Bare Metal and Corrosion	UNSAT
Cabin Area	161540	Bare Metal and Corroded Fasten	UNSAT
Cabin Area RH Exit Window	161258	Torn Seal	UNSAT
Cable Hoist Assembly	161258	Bare Metal and Corrosion	UNSAT
Cockpit Area	161258	Bare Metal and Corrosion	UNSAT
Cockpit Area	161540	Bare Metal and Corroded Fasten	UNSAT
Cockpit Flood Light	161540	Cracked Cover	UNSAT
Counter Measure Assembly	161258	Bare Metal and Corrosion	UNSAT
Flight Controls	161258	Multiple missing Shear Wire	UNSAT
Flight Controls	161540	Multiple missing Shear Wire	UNSAT
Fuel Probe	161258	Corroded	UNSAT
Fuselage	161540	FOD	UNSAT
L/R Aux Tank Mounts	161258	Bare Metal and Corrosion	UNSAT
Panel 3B-23	161540	Corrosion	UNSAT
Peddals	161540	Corrosion	UNSAT
R Engine Air Scoop	161258	Composite Worn	UNSAT
Spot Light	161540	Exposed Wire	UNSAT
Troop Seats	161540	Multiple missing Split Rings	UNSAT
Troop Seats	161540	Mounting Pin Missing	UNSAT
Utility Hoist	161540	Frayed Wiring	UNSAT
Winch Controller	161540	Broken and Uncapped	UNSAT
Wiper Assembly	161258	Bare Metal and Corrosion	UNSAT

Material Condition Inspection

Aviation Life Support System

Nomenclature	Serial	Description	Condition
Aircrew Gear	**SV0005**	**Expired Survival Items**	**UNSAT**
Aircrew Gear	**SV0019**	**Survival Gear configured incorre**	**UNSAT**
Aircrew Gear	**SV0066**	**Expired Survival Items**	**UNSAT**

06 Nov 2014

From: Aviation Maintenance Management Team FIVE Officer, Commander Naval Air Forces
To: Commanding Officer, Marine Heavy Helicopter Squadron FOUR SIX THREE

Subj: AVIATION MAINTENANCE INSPECTION RESULTS

Ref: (a) COMNAVAIRFORINST 4790.2(Series)

Encl: (1) AMI Overview
(2) CSEC Report (Disc)

1. In accordance with reference (a), the COMNAVAIRFOR Aviation Maintenance Management Team (AMMT) FIVE conducted an Aviation Maintenance Inspection (AMI) of your activity from 03-Nov to 06-Nov 2014.

2. The AMMT evaluated 39 applicable NAMP programs: 34 programs were graded as On-Track, two were graded as Off-Track and three were graded as Needs More Attention. The AMMT also conducted contingency response drills and practical proficiency examinations: five of five drills were graded Satisfactory, and 50 of 50 practical proficiency examinations were graded Satisfactory.

A. Enclosure (1) contains the grades for all programs, drills and practical examinations, and provides an overview of the discrepancies in Off-Track or Needs More Attention programs.

B. Enclosure (2) is a complete list of discrepancies and comments.

3. Command attention is needed in the following deficient areas:

A. Off-Track Programs:
Plane Captain Qualification
Technical Directive Compliance

B. Needs More Attention Programs:
Aircraft Compass Calibration
Aircraft Maintenance Material Readiness List
Naval Aviation Maintenance Discrepancy Reporting

C. Safety of Flight Discrepancies:
None noted.

D. Safety of Personnel Discrepancies:
None noted.

ENCLOSURE (192)

4. A copy of this letter will be provided to 1st Marine Aircraft Wing. The programs evaluated as Off-Track or Needs More Attention will require follow-up evaluation by 1st Marine Aircraft Wing within 90 days of completion of the AMI.

5. Program managers and personnel who merit special mention for the high quality of their programs are:

A.	(b)(6) (b) (3) 10 USC § 130b	Phase Deck MRC Verification Practical
B.		Material Control Program
C.		Missing Tool Procedures Drill
		ATAF Procedures Practical
D.		Foreign Object Damage Prevention Program
E.		RSL Inventory Practical
F.		Egress/Explosive System Checkout Program (Rated as the best program the inspector has seen)
		Laser Hazard Control Program
G.		Aircraft Armament Equipment Program
H.		Support Equipment Operator Training and Licensing Program
		Support Equipment Planned Maintenance System Program
I.		Hydraulic Contamination Control Program
J.		Tire and Wheel Maintenance Safety Program
K.		Corrosion Prevention and Control Program
L.		Logs and Records Program

6. Request your command complete the AMMT Feedback Report within 30-days of completion of the AMI. The report can be accessed on the CNAP Sharepoint at the following website address, within the "N422C NAMP" folder. https://cpf.portal.navy.mil/SITES/CNAP/N42/N422/SHARED%20DOCUMENTS/FORMS/ALLITEMS.ASPX

7. Please address any questions regarding this report to COMNAVAIRFOR N422C, NAMP Policy and Inspections, (b)(6) (b) (3) 10 USC § 130b (b)(6), (b)(3)

(b)(6) (b) (3) 10 USC § 130b

Copy to:
COMNAVAIRFOR N422
1MAW

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Aviation Maintenance Management Team
ACTIVITY: HMH-463
Audit Performed on 11/6/2014
Service Type: USMC
Maintenance Level: Organizational

AREA	*PROGRAM*	*GRADE*
200	Maintenance Training Program	On-Track
300	Fuel Surveillance Program	On-Track
400	Navy Oil Analysis (NOAP) Program	On-Track
600	Hydraulic Contamination Control Program	On-Track
700	Tire and Wheel Maintenance Safety Program	On-Track
800	Quality Assurance	On-Track
900	Maintenance Department/Division Safety Program	On-Track
1000	Naval Aviation Maintenance Discrepancy Reporting (NAMDRP) Program	Needs More Attention
1100	Aviation Confined Space Program	On-Track
1200	Foreign Object Damage (FOD) Prevention Program	On-Track
1300	Tool Control Program	On-Track
1400	Corrosion Prevention and Control Program	On-Track
1500	Plane Captain Qualification Program	Off-Track
1600	Egress System Checkout Program	On-Track
1700	Support Equipment Operator Training and Licensing Program	On-Track
1800	Support Equipment Planned Maintenance System Program	On-Track
1900	Central Technical Publications Library (CTPL) Program	On-Track
2000	Naval Aviation Metrology and Calibration Program	On-Track
2200	Hazardous Material Control and Management Program	On-Track
2400	Electrostatic Discharge (ESD) Program	On-Track
2600	Technical Directive (TD) Compliance Program	Off-Track
2900	Maintenance Control	On-Track
3100	Weight and Balance	On-Track
3200	Aircraft Records and Reports/Engine Accounting	On-Track
3300	Logs and Records	On-Track
3400	Phase Maintenance	On-Track
3600	Data Analysis	On-Track
3700	Material Control	On-Track
3800	Aircraft Maintenance Material Readiness List (AMMRL)	Needs More Attention
3900	Vibration Analysis Program	On-Track
4000	Taxi/Turnup/APU Licensing	On-Track
4500	Battery Maintenance Safety	On-Track
4600	Aircraft Compass Calibration	Needs More Attention
4700	Laser Hazard Control Program	On-Track
4800	NOMMP AWCAP	On-Track
4900	Explosives Handling Personnel Qualification and Certification Program	On-Track

Enclosure 1

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Aviation Maintenance Management Team
ACTIVITY: HMH-463
Audit Performed on 11/6/2014
Service Type: USMC
Maintenance Level: Organizational

AREA	*PROGRAM*	*GRADE*
5000	Aircraft Armament Equipment (AAE)	On-Track
5200	Aviation Life Support Systems (ALSS)	On-Track
5400	SE Misuse/Abuse Program	On-Track

Summary	*Number of Programs*
On-Track	34
Off-Track	2
Needs More Attention	3
Area of Concern	0
Not Evaluated	0
Not Applicable	0
Total	39

Enclosure 1

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 4TH QTR CY 2014
Aviation Maintenance Management Team
ACTIVITY: HMH-463
Events Completed on 11/6/2014
Service Type: USMC
Maintenance Level: Organizational

Drills and Practicals Titles	*GRADE*
DRILLS	
1. First Aid/CPR	SAT
2. HAZMAT Exposure (Eyes)/ Use of MSDS	SAT
3. HAZMAT Material Spill	SAT
4. Missing Tool Procedure	SAT
5. Thermal Runaway	SAT
PRACTICALS	
1. 500C Verification	SAT
2. Acceptance of New SE Procedures	SAT
3. AIR Inventory Procedures	SAT
4. ALSS Inventory	SAT
5. ALSS TD Verification	SAT
6. ASM Completed Training Documentation	SAT
7. ASM Training Record Review	SAT
8. ASR Verification/Calculation	SAT
9. ATAF Procedures	SAT
10. Battery Neutralization	SAT
11. CNAF SharePoint Website Familiarization	SAT
12. Conditional Inspection Generation	SAT
13. CTPL Audit	SAT
14. Daily MRC Verification	SAT
15. Egress Check Out	SAT
16. Electrical Shock	SAT
17. ESD Safe Area	SAT
18. FOD Walk Down	SAT
19. Format 350 Verification	SAT
20. Fuel Sample	SAT
21. Functional Check Flight (FCF) Brief/Debrief	SAT
22. HAZWASTE Disposal	SAT
23. Historical MAF Query	SAT
24. Hydraulic S.E. Sampling Procedures	SAT
25. Hydraulic Sample Visual Analysis	SAT
26. IMRL Issue and Receipt Procedures	SAT
27. IRAC Incorporation	SAT
28. JK Search	SAT
29. Laser Inventory Verification	SAT
30. Monthly LAMS-6 Supplemental Review	SAT

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 4TH QTR CY 2014
Aviation Maintenance Management Team
ACTIVITY: HMH-463
Events Completed on 11/6/2014
Service Type: USMC
Maintenance Level: Organizational

Drills and Practicals Titles	*GRADE*
31. MSDS Location/ID/Verification	SAT
32. MSDS Proper Utilization	SAT
33. NAT 01 Verification	SAT
34. NAT 02 Verification	SAT
35. OOMA Log Set Update/Verification	SAT
36. Phase Deck MRC Verification	SAT
37. PPE Checkout/USE	SAT
38. Pre-Op Electro Static Discharge (ESD) Mat	SAT
39. Pre-Op HSU	SAT
40. Pre-Op PODS	SAT
41. Pre-Op Tire Inflation Gauge	SAT
42. Preparation and Safety Requirements for Fuel Cell Maintenance	SAT
43. RSL Inventory	SAT
44. Safe for Flight	SAT
45. SE Issue and Receipt Procedures	SAT
46. TD Review Procedures	SAT
47. Tire and Wheel Acceptance Procedures	SAT
48. Tool Deviation Request Procedures	SAT
49. Tool Inventory	SAT
50. Work Center Quarterly Local Asset Management System (LAMS) Verification	SAT

Summary	*Number of Programs*
SAT	55
UNSAT	0
Total	55

Enclosure 1

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 4TH QTR CY 2014
11/06/2014
Discrepancy Report, Activity Copy, Overview
COMNAVAIRPAC
HMH-463

Evaluator: (6) (b) (3) 10 USC § 1

Off Track - Plane Captain Qualification Program (1500)

This program is graded as Off Track due to the following reason:

- Plane captains not signing off complete daily inspections in OOMA. Missing the following MRC cards 1.1, 2.11 and 13.a

Evaluator: (6) (b) (3) 10 USC § 1

Off Track - Technical Directive Compliance Program (2600)

This program is graded as Off Track due to the following reasons:

- Multiple aircraft with numerous TDs in an unverifiable or incorrect status
- Technical Directive Work Orders being signed off with incorrect serial number

Evaluator: 3) 10

Needs More Attention - Naval Aviation Discrepancy Reporting Program (1000)

This program is graded as Needs More Attention due to the following reason:

- AIDRs were not submitted on multiple occasions after aircraft modifications

Evaluator:)(6) (b) (3) 10 USC § 1

Needs More Attention - Aircraft Maintenance Material Readiness List (3800)

This program is graded as Needs More Attention due to the following reason:

- Insufficient physical inventory process due to multiple pieces in IMRL assets not properly accounted for

Evaluator: (6) (b) (3) 10 USC § 1

Needs More Attention - Aircraft Compass Calibration Program (4600)

This program is graded as Needs More Attention due to the following reason:

- Aircraft: 12, BUNO: 161265, has five (5) entries on the In-Flight Standby Compass Card that are out of tolerance

Enclosure 1

AMMT - Computerized Self Evaluation Checklist - COMNAVAIRFORINST 4790.2B
Version 6.1B, 4TH QTR CY 2014
11/06/2014

Discrepancy Report, Activity Copy, Work Center Index
COMNAVAIRPAC
HMH-463

01A Assistant Maintenance Officer
Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

020 Maintenance/Production Control
Evaluated by : (b)(6) (b) (3) 10 USC § 13(**Assisted by:**

020 Maintenance/Production Control
Evaluated by : (b)(6) (b) (3) 10 USC § 13(**Assisted by:**

020 Maintenance/Production Control
Evaluated by : (6) (b) (3) 10 USC § 1 **Assisted by:**

020 Maintenance/Production Control
Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

021 Off Track
Evaluated by : (6) (b) (3) 10 USC § 1 **Assisted by:**

021 Off Track
Evaluated by : (6) (b) (3) 10 USC § 1 **Assisted by:** (b)(6) (b) (3) 10 USC § 130b

022 Needs More Attention
Evaluated by : (3) 10 U **Assisted by:**

022 Needs More Attention
Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

022 Needs More Attention
Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

02N NALCOMIS MDBA/A, SA/A
Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

040 Quality Assurance/Analysis
Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

040 Quality Assurance/Analysis
Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

040 Quality Assurance/Analysis

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

040 Quality Assurance/Analysis

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

04A Technical Library

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

05C Accountable Material/IMRL Manager

Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

05D Aviation Tool Issue/Tool Control Center

Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

05H Hazardous Material Control

Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:** (b)(6) (b) (3) 10 USC § 130b

120 Airframes Branch

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

12C Corrosion Control Shop

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

130 Aviation Life Support Systems Branch

Evaluated by : (6) (b) (3) 10 USC § **Assisted by:**

230 Armament Branch

Evaluated by : (b)(6) (b) (3) 10 USC § 130 **Assisted by:**

310 Plane Captain Branch

Evaluated by :)(6) (b) (3) 10 USC § 1 **Assisted by:**

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
3000 MARINE CORPS PENTAGON
WASHINGTON D.C. 20350-3000

MCO 3710.8
AVN
30 Sep 2011

MARINE CORPS ORDER 3710.8

From: Commandant of the Marine Corps
To: Distribution List

Subj: UNITED STATES MARINE CORPS NAVAL AIR TRAINING AND OPERATING PROCEDURES STANDARDIZATION (NATOPS) PROGRAM

Ref: (a) OPNAVINST 3710.7U
(b) NAVAIR 00-80T-112 (NOTAL)
(c) COMNAVAIRFORINST 4790.2A CH-2 (NOTAL)
(d) NAVMC 3500.14
(e) MCO P1000.6G
(f) MCO 3710.4A
(g) MCO 3710.6
(h) NAVMC 3710.6
(i) MCO P5720.73 Ch 1
(j) OPNAVINST 3750.6R
(k) MCO 5100.29A
(l) MCO 1542.7 Series
(m) SECNAV M-5210.1
(n) Federal Acquisition Regulation, March 2005, Vol. I
(o) OPNAVINST 5510.48

Encl: (1) USMC NATOPS PROGRAM
(2) USMC NATOPS AND PUBLICATIONS MATRIX
(3) USMC INDIVIDUAL WAIVER/EXTENSION REQUEST TEMPLATE
(4) USMC NATOPS PROGRAM EVALUATION CHECKLIST
(5) UNIT NATOPS PROGRAM EVALUATION REPORT
(6) USMC UNIT WAIVER/EXTENSION REQUEST MESSAGE TEMPLATE
(7) USMC DIFDEN WAIVER REQUEST TEMPLATE

1. Situation

a. Purpose of this Order is to amplify policy and procedural guidance of references (a) through (h) in administering the NATOPS program within Marine Corps Aviation and set forth the NATOPS policy, organization, and requirements of the Commandant, U.S. Marine Corps. This Marine Corps Order (MCO) will specifically address procedures and guidelines for individual and unit NATOPS and Instrument Evaluations, waivers, extensions, reporting, and flight operation standardization within Marine aviation. This Order shall be applicable to all USMC aircraft platforms and aviation related systems.

b. The essential elements of the NATOPS program are a thorough knowledge of all aircraft systems and adherence to approved operating procedures and standardization. A NATOPS evaluation measures the knowledge and compliance with operating procedures, not flight proficiency or weapons readiness. Any tendency to expand the NATOPS evaluation into these areas must be avoided. The NATOPS Instrument Evaluation program assists the commanding officer in maintaining a high level of all-weather flying proficiency in his/her unit.

c. Reference (a) established the NATOPS program within Naval Aviation and the instructions and information contained therein are applicable to

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

ENCLOSURE (193)

Chapter 4

Waivers and Extensions

1. General Administration of Waivers and Extensions. Waiver policy for the administration of reference (a) is clearly defined in chapter 1 of that directive. For the purposes of submitting requests and accountability for completing the required action items, a clear understanding and expectation between a waiver and an extension is required. A waiver "waives the requirements to perform an actionable item" and shall include a time period as applicable. For NATOPS program compliance, a standing waiver shall not exist. Extensions are to be utilized to extend the time period necessary to complete an actionable item. Individuals and units are directed to clearly request the appropriate recourse for their circumstance.

a. USMC Waiver Authority. Authority for the deviation of policy set forth in the execution of this Order for all USMC commands and personnel resides with DC AVN. DC AVN delegates waiver authority appropriately defined in reference (a) to MARFORCOM, MARFORPAC, and CG 4th MAW for those individuals and units under their cognizance. DIFDEN waivers are addressed in paragraph 6 of this chapter.

b. Waivers

(1) There are no permanent waivers.

(2) All waivers for USMC personnel and units must be submitted via naval message for review and disposition and resubmitted again on an annual basis. Submission process requires addressing the authorizing COG or ISIC in addition to informing the other USMC COGs (e.g., DC AVN, MARFORCOM, MARFORPAC, and CG 4th MAW) on all waiver request submissions utilizing the message template depicted in enclosure (6). DC AVN (Code ASM) will be copied/informed on each message to preclude differences based upon location and standardization of policy. Waiver requests shall be specific for the purpose for which they are required and shall include a time limit and justification. Under no circumstances will a request for a waiver be submitted nor accepted due to complacency, oversight or willful disobedience of reference (a).

(3) Failure to resubmit constitutes the withdrawal of the waiver by the requesting command and/or individual.

(4) Concurrent with the waiver resubmission, a copy of the proposed new procedures for NATOPS manuals and the justification for the proposed change shall be submitted per the directions given in chapter 2 of reference (a). All waiver resubmissions and their associated change proposal (for NATOPS Manual, NATOPS Flight Manual, and recommended changes to this Order) shall be forwarded through the chain of command via the appropriate COG for endorsement or non-concurrence.

c. USMC Extension Authority. Authority for the deviation of policy set forth in the execution of this Order for all USMC commands and personnel resides with DC AVN. MARFORCOM, MARFORPAC, and CG 4th MAW shall have extension authority for those individuals and units under their cognizance.

d. Waiver Delegation Authority. DC AVN, MARFORCOM, MARFORPAC, and CG 4th MAW may grant waivers to the provisions of NATOPS flight manuals as delineated in reference (a). Waiver requests shall be specific for the purpose for which they are granted and shall include a time limit and justification. When one COG grants or denies a waiver/extension to an individual or unit under their cognizance and another individual/unit requests the same with another COG and the outcome is opposite (e.g., MARFORCOM denies request for waiver and MARFORPAC grants a similar request), then DC AVN shall be the final authority on the approval/denial of those requests. This may include the revocation of a previously denied/granted requested waiver. This action standardizes policy amongst USMC NAG/COG members and Marine Aviation. For USMC personnel assigned to USN commands or units, those individuals shall submit their extension or waiver requests through their current chain of command (e.g., a Captain (USMC) assigned to VFA-XXX shall submit his request for an extension through the VFA-XXX chain of command to the appropriate COG, in this case the TYCOM). A copy of the request and all subsequent endorsements/denials shall be forwarded to DC AVN (Code ASM).

e. Exceptions. Exceptions to waiver or extension request/approval procedures are rare and shall require justification for each extenuating circumstance. Submission of a request for a waiver/extension or an exception to the waiver/extension process does not alleviate nor defer any actionable items required from the individual or unit.

2. Individual Waivers. An individual may request a waiver as defined in reference (a) of a current NATOPS/NATOPS Instrument Evaluation, Naval Aviation Survival Training Program (NASTP), Flight Physical, and Flight Time utilizing the form and format in enclosure (3). The circumstance and situation for deployments is clearly delineated in chapter 2 of reference (a). All other circumstances will require a special request. An individual submits via letter format the request for the waiver via the chain of command to the appropriate COG. The COG has the authority to grant the waiver of individual evaluations and requirements for up to 90 days past the actionable date with due justification (e.g., medical condition which precludes the performance of a NATOPS or NATOPS Instrument evaluation or participation in NASTP, etc.), but it will not be granted for complacency, lack of oversight or willful disobedience of reference (a). The request for an waiver shall be submitted no earlier than 45 days prior and no later than 30 days prior to the actionable date.

3. Unit Waivers. Waivers should not be requested for Unit NATOPS evaluations. An extension shall be the first mitigating step towards compliance IAW paragraph 5. The circumstance for deployments is delineated in chapter 2 of reference (a). All other circumstances will require a special request. For circumstances not defined herein, a unit CO may request a waiver through the appropriate COG or ISIC in addition to informing the other USMC COGs utilizing the message format depicted in enclosure (6).

4. Individual Extensions. In lieu of a waiver, an extension should be requested as defined in reference (a). An individual may request an extension of a current NATOPS/NATOPS Instrument Evaluation, NASTP, Flight Physical, and Flight Time. The circumstance and situation for deployments is clearly delineated in chapter 2 of reference (a). All other circumstances will require a special request. This request shall be specific for the purpose for which it is granted and shall include a time limit and justification. An individual submits via letter format the request for the

extension via the chain of command to the appropriate COG. The COG has the authority to grant the extensions of individual evaluations and requirements for up to 90 days past the actionable date with due justification (e.g. medical condition which precludes the performance of a NATOPS or NATOPS Instrument evaluation or participation in Physiology or Water Survival training, etc.), but it will not be granted for complacency, lack of oversight or willful disobedience of reference (a). The request for an extension shall be submitted no earlier than 45 days prior and no later than 30 days prior to the actionable date.

5. Unit Extensions. A unit CO may request an extension of a unit's NATOPS evaluation to the appropriate MM informing his chain of command and COG. The circumstance for deployments is delineated in chapter 2 of reference (a). All other circumstance will require a special request and shall be specific for the purpose for which it is granted and shall include a time limit and justification. A unit submits the request via naval message for an extension to the MM and informs the appropriate chain of command and COG. The MM will either grant or deny the extension request and inform the requesting unit, the requestor's chain of command (MAG/MAW), and the respective COG. Under no circumstances will a request for an extension be submitted nor accepted due to complacency, lack of oversight or willful disobedience of reference (a). The request for an extension shall be submitted no earlier than 60 days prior and no later than 30 days prior to the actionable date. For Unit NATOPS evaluations of MMUs, extension requests shall be routed from the MMU/FRS CO via the appropriate MAG and MAW for concurrence/non-concurrence to the COG for final decision and adjudication.

6. Duty Involving Flying Denied (DIFDEN) Waivers

a. Purpose. A DIFDEN waiver allows Aeronautically Designated Personnel (ADP) in DIFDEN status the opportunity to conduct flight operations, on a not to interfere basis, with an endorsing aviation unit. Commands are not obligated to provide any flight time (including OPNAV minimums) to ADP on a DIFDEN waiver.

b. Administration. DC AVN is the approval authority for DIFDEN waivers. DIFDEN waivers are granted on a not to interfere, case-by-case basis and shall be closely controlled by DC AVN (Code ASM).

(1) All OPNAV requirements, with the exception of annual flight time minimums, shall be adhered to and complied with as if on Duty Involving Flight Operations (DIFOPS) orders. This includes, but is not limited to obtaining and maintaining NATOPS and NATOPS Instrument qualifications as well as complying with all NASTP, T&R, and command requirements.

(a) DIFDEN waivers do not alleviate ADP or commands from any other OPNAV, NATOPS, or T&R program requirements established to safely sign for and/or fly Marine Corps aircraft relative to the specific role, mission, and responsibility.

(b) Flights conducted under DIFDEN waiver shall update ADP's currency and proficiency with regards to T&R program manual codes.

(2) Flights in a DIFDEN with waiver status do not constitute operational flying months toward the achievement of operational flight gates.

Summary of Interview

(b)(6) (b) (3) 10 USC § 130b

HMH-463 AMO prior to mishap
18 March 2016 at MCBH Kaneohe Bay, Hawaii

In June, it will be two years that I've been in the squadron. I'm now in the S-4. I was going to take out the MRF-D and focus less on the S-shop and more on the det. Been there since 9 November.

In 2014, I was the AMO during the 2014 CNAF.

Night of the mishap. Phone notification. Flew Wednesday night. (b)(6), (b)(3) was with) (3) 10 US and (b)(6), (b)(3) I was with (b)(6) (b) (3) 10 USC § 130b and (b) (3) 10 USC

(b)(6), (b)(3) were the crew the next night. The ODO notified me. Called the (6), (b first, then he notified me. I came in.

When I walked in the Ready Room, they were taking notes on the white board. ODO was frantic. b)(6) (b) (3) 10 USC § 13 called me. He was assisting (b)(6) (b) (3) 10 USC § 130b.

(b)(6) (b) (3) 10 USC § 130b was there a few minutes before me. Rounded up everything.

They did a good job with mishap checklist. The wives showed up probably around 6 or 7 at night. It was two crew chief wives at first. I got the heritage room locked on.

I was surprised that the CO was relieved based on where the fleet is right now. I'd expect several other COs to be relieved right now. I know why we failed several inspections. I think the inspection team walked in and heard several answers they didn't want to hear.

We failed the inspection for a number of programs, but not for safety reasons. We had the PEB. Have to house it close by. It's not a safety of flight thing.

As the AMO for 18 months, I had some challenges. Personalities in the maintenance department. Control and QA continually battled. On multiple occasions, I had to mediate. We'd talk it out and then there would be a turn around for a short time.

Post RIMPAC we had 5 aircraft with 0 hours. Inherited a/c from 465. Five phase aircraft. Then we had some questionable calls from QA. Control was trying to expedite decision making. They ended up stepping on toes. This resulted in QA feeling their calls were being questioned. It worked itself out. By Feb we had 7 almost 8 RBA. This was 2015. We did a max launch for 10 USC 130b. In my mind those issues post RIMPAC had worked themselves out. Control and QA had worked their problems out. We had come off CNAF.

I'm a huge fan of (3) 10 U. (b)(6), (b)(3 in QA told me. Our problem is that we just passed this inspection, we are taking Christmas leave. Our problem will be when we turnover (PCS) in the summer. We will roll into a new summer and get crushed. We knew MALS and Wing were full inspections, not assists.

I didn't have a AAMO. (b)(6), (b)(3) left early in the summer. I didn't really trust the maintenance chief to run the programs. When I took over in 2014, they had already had some hits from the safety center. I received the MALS

ENCLOSURE (194)

assist (14 June) and culture survey. Communications problems, etc. I got here July on a Sunday and left Monday for the boat. After RIMPAC I was the acting AMO. My turnover was on RIMPAC essentially.

Q: You have key SNCO's running programs. Then in the spring you will have major turnover of key program managers.

A: Did I trust the maint chief to run the programs. Between myself, MC, AAMO and we each had 13 programs to supervise. This was our prep for CNAF.

AFB 346. Had MRF D going out the door. Five to make 4. For the Aquis inspection. This was because of the strut Class C for the initial MRF D.

Aug 2014, I told (b) (3) 10 USC that post RIMPAC we had 5 a/c to phase. We needed to work 12 on 12 off until we phased five planes. Two phase crews that we built. Those a/c came back with a lot of downers.

Q: How did you get five a/c stacked up in phase?

A: When we got off RIMPAC we took 3 a/c from 465.

Q: There's a difference in documenting man-hours. 3M summary. Your maintenance man-hours are actually lower than the other squadrons. Are the maintainers not logging correctly.

A: No goal set to where the 12 on, 12 off schedule was going to end.

Q: How did you fly when you were below 50%?

A: I had to write briefs. I think because of AFB and the down a/c we were not going to make the keyholes to get guys ready for WTI and NSI.

Q: There were high canny rate. Why were you pulling parts from here?

A: Previous years guidance was we'll fail here before we fail there.

Q: How often did you do that in the last MRF D?

A: Once a week, once every two weeks.

Q: Who made the canny decisions? I did. I briefed the CO but it depended on the turnaround time. Supporting MRF D puts a huge load on the maintenance department.

Q: Was there ever a down the plane game going on?

A: I have heard of that. We had a QA, CDI issue. New CDIs being questioned about their calls. Brand new CDIs being questioned by MC.

Q: What's up with the aux tanks in the hangar.

A: An a/c that came from IMC did not have aux tanks. We didn't know where to get them. (b) (3) 10 USC was looking for them. He pulled NRFI aux tanks off the stick.

Q: Did you coordinate with MALS?

A: Yes. We had QA look at them initially.

Q: When did OPCs stop?

A: The old SOP states we do them.

Q: Is the new SOP done?

A: It was never rewritten. NATOPS says it is at the discretion of the commander.

Q: 419's any issues with matching speed control levers?

A: You have one run away usually at about 130kts. Maintenance page on IMDS. I usually have the radio and nav pages up.

Q: Do you think the pilots are getting enough flight time?

A: More is better. No sir.

Q: How many instrument waivers?

A: Several.

Q: What were your priorities during AFB, MRFD?

A: Focus was on the flyers. We shifted our focus to a different strategy (b)(6) (b) (3) 10 USC § 130 and b)(6) (b) (3) 10 USC § 13 were developing best practices. Our squadron needs some. Ops Maint Contract. When you support frags, when you will have a spinning back up, when you will focus on maintenance.

Q: Why wasn't there a spinning back up for the night flight? Not sure.

A: 15 minute penalty turn for a night flight.

Q: Were you chasing x's.

A: Yes. WTI candidates, NSI checks coming up.

Q: You had 50% and had the crew do a 15 minute penalty turn for a damper check. Did the ops maint contract go into effect?

A: In August we started grasping around what this mant for our squadron. NSI checks were the same week of the inspection.

Q: In your emails, you broke down the work. Then you said there were 4 or 5 you said you weren't going to get to.

A: Manpower issues: we were getting the right ranks but not the right flavor or experience level. We would sacrifice our own training to make frags. The frustration was not just with the number of frags, but when they were popping up. Mondays or Fridays, late notification.

Q: Were you privy to the change in flight hours to 3000?

A: No sir. Probably the CO probably determined for proficiency of the pilots. Wing calling. (b) (3) 10 USC [redacted] Ultimately this resulted in an abuse of that relationship.

Q: Did MALS support you through this whole ordeal?

A: No, not to their fullest extent.

Q: What areas?

A: One of my biggest frustrations was the way we requested and received tech support. We lost the airframes and power plants guy. Not big. But when we lost the avi tech rep. until April 2015. Our tech reps we had access to the engineers in other channels. We'd ask for a tech rep. and wing would come back and say that we had not exhausted all on site resources. Tech Reps were not available due to the tyranny of distance in HI. Wing hesitant to send people.

MMCO was made a safe for flight in case he needed to safe a/c again. He was focused on the close fight and not focused on the long range b/c MRF D was out, WTI was out, and we ran two shifts.

This ties into the inspection prep. He took on additional maintenance programs because some people who were in charge of those programs weren't doing their jobs. He had 7 programs, doing the daily screening of workload trying to help the new MC chief, and not enough time in the day.

Missing an AAMO. We had 1 FCP in maintenance, (6) (b) (3) 10 USC §. (b) (3) 10 USC was the QAO during the inspection. Manpower and experience.

Two new officers in maintenance during the summer time. Along with heavy SNCO turnover.

Q: Did you hold anyone accountable after the inspection?

A: We started making them do weekly briefings. We got rid of (b) (3) 10 USC. No adverse fitness report. Moved (b)(6) (b) (3) 10 USC § 130 to phase. Couldn't get rid of (b)(6) (b) (3) 10 USC § 130. No place to put him.

Q: Op pause. Were you surprised. Yes.

A: When you left the AOM, who was in charge in your mind?

A: b) (3) 10 US The S doesn't mean anything. Changes would happen after I signed it. I would show up for an fcf that I was a flyer that night. AARs from Frags, flight schedules, MSHARP from frags late, didn't get the opportunity to do PT runs.On Tuesday, (b) (3) 10 USC knew that the new CO was b) (3) 10 US. But didn't know when he was to arrive.

Q: Did you think (b)(6), (b)(3) was going to get relieved?

A: I thought he would. CO said people are going to be moving around. At the initial meeting in the ready room 1500 AOM Wednesday. (b)(6), (b)(3) state of mind. He was wrapped up about it.

Q: Why so close to the coast?

A: My guess would be WX.

Q: You wouldn't fly down kam highway?

A: No

I thought it was weird that (3) 10 U was at the 1700 meeting with the CO the night of the mishap. Junior Marines/Junior Safe for flight had to make the MMCO safe for flight. The WITs were sent out for MRF-D. MMCO became a day-to-day nose down in AMSRR. Was unable to provide a six month vision or understaffed officers in maintenance. Only one FCF officer in the garage and

that was the AMO. b)(6) (b) (3) 10 USC § 13 told (3) 10 U that MAG told him to "keep pressing."

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
31 Oct 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: [redacted] 1 [redacted]

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a 90 day extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 29 Jan 16.

[redacted]
(b)(6) (b) (3) 10 USC § 130b

Copy to:
S-3
DSS

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
1 Sep 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. Due to returning to the squadron from Duty Involving Flight Denied, you are granted a six month extension to your Instrument Rating/Qualification.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 1 Feb 16.

(b)(6) (b) (3) 10 USC § 130b

Copy to:
S-3
DSS

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
30 Sep 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: [redacted]) 10 [redacted]

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a 90 day extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 29 Dec 15.

[redacted]
(b)(6) (b) (3) 10 USC § 130b

Copy to:
S-3
DSS

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
30 Dec 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a 6 month extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 31 July 2016, or at your first available opportunity.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (115)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
1 Sep 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: [redacted]) 1[redacted]

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. Due to returning to the squadron from Duty Involving Flight Denied, you are granted a six month extension to your Instrument Rating/Qualification.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 1 Feb 16.

[redacted]
(b)(6) (b) (3) 10 USC § 130b

Copy to:
S-3
DSS

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
25 Feb 16

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a six month extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 31 August 2016.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (95)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
28 Jan 16

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a six month extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 31 July 2016.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
30 Dec 15

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a 6 month extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 30 June 2016, or at your first available opportunity.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (195)

UNITED STATES MARINE CORPS
MARINE HEAVY HELICOPTER SQUADRON 463
MARINE AIRCRAFT GROUP 24
1ST MARINE AIRCRAFT WING
PSC BOX 63055
MCBH, KANEOHE BAY, HAWAII 96863-3055

IN REPLY REFER TO
3710
DSS
28 Jan 16

From: Commanding Officer, Marine Heavy Helicopter Squadron 463
To: (b)(6) (b) (3) 10 USC § 130b

Subj: EXTENSION OF STANDARD INSTRUMENT RATING

Ref: (a) OPNAVINST 3710.7U

1. Per the reference, you are required to maintain your currency for your Standard Instrument Rating on an annual basis.

2. After a thorough review, you are granted a six month extension to your Instrument Rating/Qualification. Squadron aircraft have been unavailable due to maintenance issues, circumstances that were beyond your control.

3. Per the reference, I am granting an extension of your instrument rating. All annual minimums and your Standard Instrument Rating Check Flight must be completed by 30 April 2016.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (195)

(b)(6) (b) (3) 10 USC § 130b

From: (b)(6) (b) (3) 10 USC § 130b
Sent: Wednesday, December 30, 2015 11:28
To: (b)(6) (b) (3) 10 USC § 130b
Cc: (b)(6) (b) (3) 10 USC § 130b; (b)(6), (b)(3) (b)(6), (b)(3) (b)(6) (b) (3) 10 USC § 130b
Subject: DC(A) READINESS BRIEF--HMH DATA
Attachments: DC(A) Readiness Brief_Dec 17th - CH-53E data.pptx
Signed By: (b)(6) (b) (3) 10 USC § 130b

(3) 10 U

FYI. This is DC(A)'s FY15 wrap up of aviation readiness. I have pulled the HMH portion out for you all to take a look at. I am going to use this as a discussion point with the other MAG CO's at the TTF in January.

Once you all have had a chance to look this over, I would be interested in your thoughts.

R,

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE (196)

(b) (5)

(b) (5)

(b) (5)

(b) (5)

(b) (5)

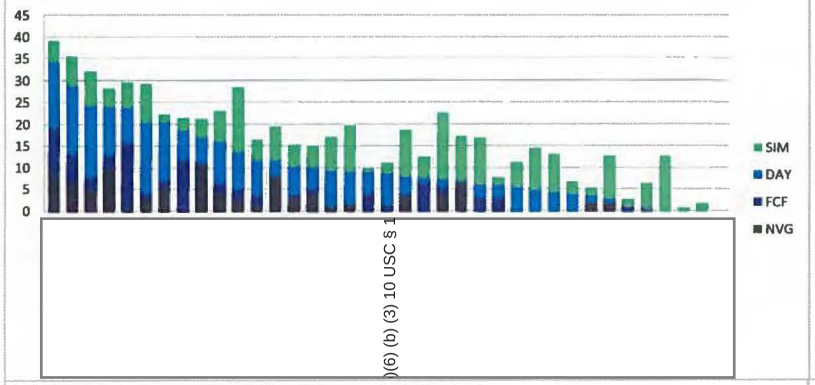
(b) (5)

(b) (5)

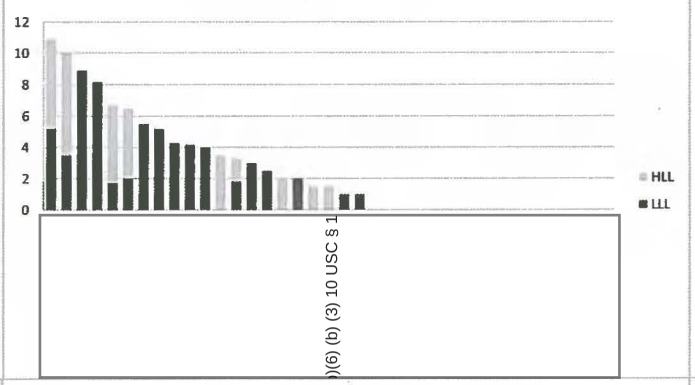
CH-53E SUMMARY JUNE - DECEMBER

Printed on: 5/4/2016

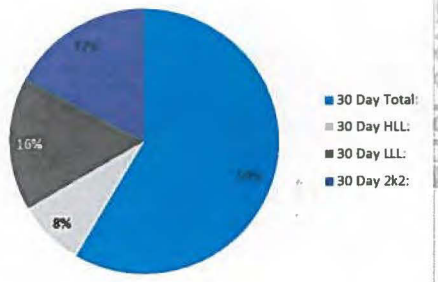
DEC 15 PILOT HOURS SUMMARY



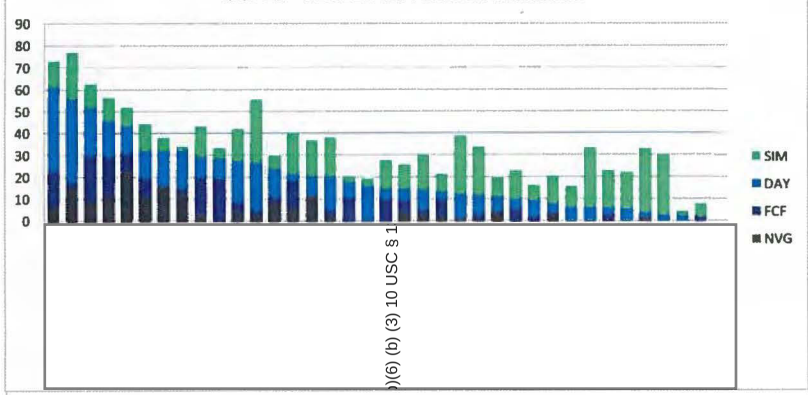
DEC 15 NVG HOURS



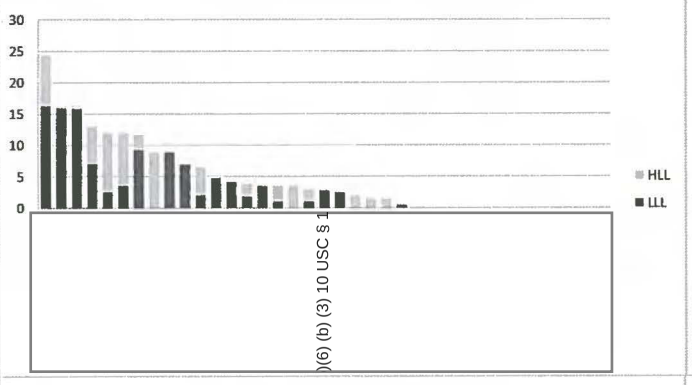
DEC 15 SUMMARY



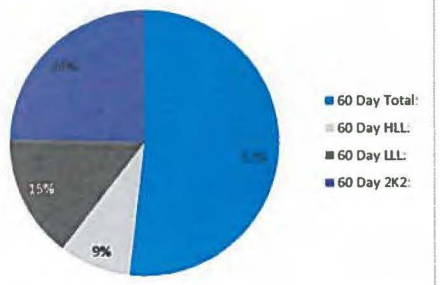
OCT 15 - DEC 15 PILOT HOURS SUMMARY



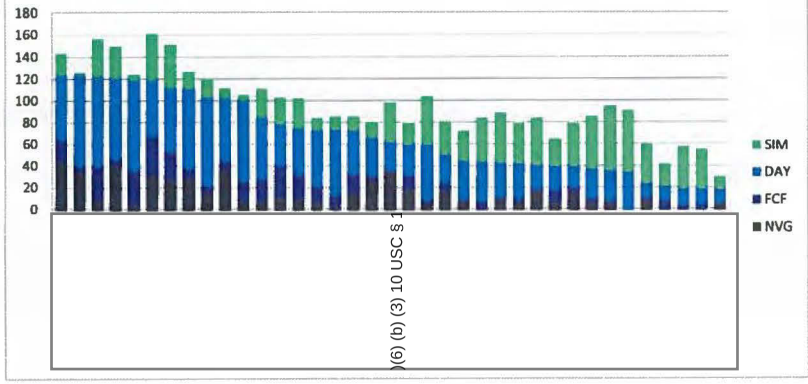
OCT 15 - DEC 15 NVG HOURS



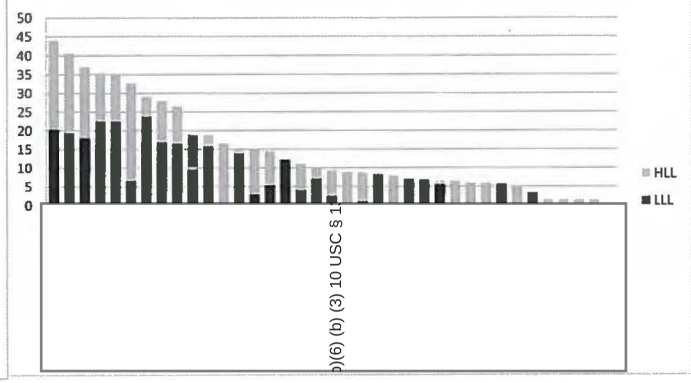
OCT 15 - DEC 15 SUMMARY



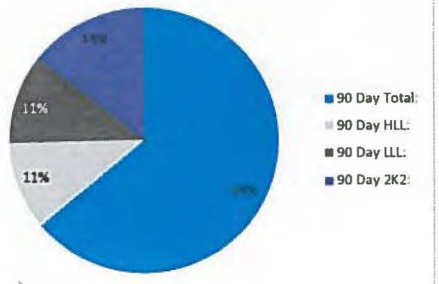
JUN 15 - DEC 15 PILOT HOURS SUMMARY



JUN 15 - DEC 15 NVG HOURS



JUN 15 - DEC 15 SUMMARY



ENCLOSURE (1971)

291

Pages 318 through 319 redacted for the following reasons:
- -
NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT http://www.navsea.navy.mil/Contact/FOIA/

DEPARTMENT OF THE ARMY
United States Army Combat Readiness Center
Fifth Avenue, Building 4905
Fort Rucker, Alabama 36362-5463

DEPARTMENT OF THE NAVY
Naval Safety Center
375 A Street
Norfolk, Virginia 23511-4399

Headquarters, United States Marine Corps (Safety Division)
2 Navy Annex
Washington, DC 20380

DEPARTMENT OF HOMELAND SECURITY
United States Coast Guard, Health and Safety Directorate
2100 Second Street SW, Room 3317
Washington, DC 20380

DEPARTMENT OF THE AIR FORCE
Air Force Chief of Safety
1400 Air Force Pentagon, Room 5E161
Washington, DC 20593

10 May 05

MEMORANDUM OF AGREEMENT
BETWEEN
ARMY COMBAT READINESS CENTER
AND
NAVAL SAFETY CENTER
AND
HEADQUARTERS, UNITED STATES MARINE CORPS (SAFETY DIVISION)
AND
UNITED STATES COAST GUARD HEALTH AND SAFETY DIRECTORATE
AND
AIR FORCE SAFETY CENTER

Subj: POLICY ON THE COLLECTION AND ANALYSIS OF MISHAP HUMAN FACTORS DATA

Encl: (1) Joint Services Safety Chiefs human factors analysis and classification system and users guide

1. **Purpose.** To insure uniform collection and analysis of human factors data resulting from military mishaps.

2. **Scope.** This policy addresses only the military service safety centers and their collection of human factors data from mishaps. It does not affect any other operation of the services.

3. **Background.** The services have been collecting human factors data using many different models resulting in a disparity in data and difficulty in creating joint approaches to mitigating the human factors hazards present in a large majority of mishaps. The Joint Services Safety Chiefs Conference (JSSC) requested that the services modify and adopt a version of the Human Factors Analysis and Classification System (HFACS).

Subj: POLICY ON THE COLLECTION AND ANALYSIS OF MISHAP HUMAN FACTORS DATA

The Human Factors Working Group (HFWG) of the Aviation Safety Improvements Task Force and JSSC was charged to develop and field joint human factors analysis taxonomy. The Army will lead the development of a training program for use by

ENCLOSURE (1)

all the services. Each service will develop their service specific implementation plan with the goal of implementation two years after signature of this MOA.

4. **Policy**. Enclosure (1) is the jointly created HFACS taxonomy. The parties agree to collect and analyze mishap human factors using this taxonomy.

5. **Review and distribution of policy**. HFWG shall meet, discuss, and approve additions and changes to enclosure (1) on a semiannual basis during JSSC meetings. A copy of enclosure (1), with all approved changes, shall be published prominently on the Naval Safety Center website. That posting may be used as a target link from all parties' web sites.

6. **Effective date, review, modification, termination, and copies of this agreement**. This agreement is effective on the date of the last signature and shall remain in effect until rescinded, revised, or superseded. This agreement may be cancelled at any time by mutual agreement, by any party with at least thirty (30) days written notice, or by implementation of a permanent Department of Defense directive or instruction regarding HFACS. All parties shall review this agreement each year. This agreement may be modified, in writing, with the written agreement of all parties. A written request for modification shall be provided to all parties at least sixty (60) days prior to the proposed date of change. This agreement is executed in five separate originals, each to be held by one party (Army Combat Readiness Center (SJA), Naval Safety Center (03), Headquarters, U.S. Marine Corps, Coast Guard Health and Safety Directorate, and Air Force Safety Center (JA)).

J. A. SMITH
BG USA
Director of Army Safety

R. E. BROOKS
RADM USN
Commander, Naval Safety Center

(b)(6) (b) (3) 10 USC § 130b

P. J. HIGGINS
RADM USPHS
Director of Health and Safety
U.S. Coast Guard

M. L. McFANN
MG USAF
Chief of Safety

Department of Defense Human Factors (DoD HFACS 7.0) Analysis and Classification System

(*v.* 7.0)

Executive Summary

This Department of Defense Human Factors (DoD HF) Guide explains procedures for investigating and reporting all DoD mishaps. It supports DoDI 6055.07, Mishap *Investigation, Reporting, and Record Keeping.* The DoDI directs DoD components to "Establish procedures to provide for the cross-feed of human error data using a common human error categorization system that involves human factors taxonomy accepted among the DoD Components and U.S. Coast Guard." It is intended for use by all persons who investigate, report and analyze DoD mishaps, and is particularly tailored to the needs of persons assigned to Interim Safety Boards and formal Safety Investigation Boards following all Classes of mishaps. There are myriad potential human factors, all of which need to be assessed for relevancy during a mishap investigation. *No investigator, flight surgeon, physiologist, human factors consultant or aviation psychologist can be expected to be fully familiar with all potential human factors*

When using this human factors model, the investigator should consider applying the model to three distinct areas of consideration: environmental, individual and the event or mishap. The mishap crew, operator, or team reacts to the environment to which they are exposed. The environmental factors cover not only the physical environment to which the individual members are exposed, but also the organizational and supervisory environments and specific physical and technological preconditions. The individual factors cover acts, precondition and supervision factors. The mishap factors can cross all four tiers of the model. The investigator can apply this model by entering at any tier that is specifically related to environmental, individual or mishap factors discovered during the analysis. This model can be used as either a primary or secondary tool to investigate both active and latent failures. Our model is designed to present a systematic, multidimensional approach to error analysis. This human factors model covers human error from three perspectives:

- Cognitive Viewpoint and Human System Interaction and Integration
- Human-to-Human Interaction
- Sociocultural and Organization

When using our DoD HF Taxonomy for either primary investigation or secondary analysis, we must assume error can mean several things:

Error can mean several things:

- *Error as the Failure itself (e.g. the operator's decision was an error.)*
- *Error as the cause of failure (e.g. The mishap was due to failure to provide guidance – supervisory error)*
- *Error as a process or, more specifically, as a departure from a standard (intentional or unintentional as a one time or routine occurrence)*

A reasonable synthesis of these assumptions, as suggested by Senders and Moray (1991), is the following: Human error occurs when human action is performed that was either (1) not intended by the actor, (2) not desired according to some specified set of rules or by some external observer, or (3) contributed to the task or system "going outside its acceptable limits."

This DoD Guide starts with a brief history of the development of the DoD HFACS followed by an introduction and description of the human factor and human performance application of this model. The Guide concludes with a high-level structural overview of the taxonomy and definitions.

History

The Secretary of Defense published a memorandum 19 May 2003 challenging the services to reduce mishaps by 50% over a 2 year period. The desired end state was to increase operational readiness. This memorandum resulted in the creation of the DoD Safety Oversight Committee to provide guidance to the DoD and individual services on best practices and methods to accomplish this mandate.

The Aviation Safety Improvement Task Force (ASI-TF) was established to meet these DoD requirements. The ASI-TF subsequently established the Human Factors Working Group with a charter to identify data-driven, benefit focused, human-factor and human-performance safety strategies designed to identify hazards, mitigate risk and reduce aviation mishaps inherent in aircraft operations throughout the DoD.

Enclosure (1)

Introduction

Mishap or event investigation can be extremely difficult, time-consuming and stressful, but it can also be rewarding when we recognize that the contributions we make will improve safety. A thorough mishap investigation is absolutely necessary to determine the cascading events causal to a mishap, and to recommend corrective actions to prevent recurrence. This guide provides the mishap investigator with a proven template that aids in organizing the investigation while providing a detailed analysis of human error for on-scene investigation and post-hoc mishap data analysis, revealing previously unidentified human-error trends and hazards.

Human error continues to plague both military and civilian mishaps. Analysis indicates that ***human error is*** identified as a causal factor in ***80 to 90 percent of mishaps***, and is present but not causal in another 50 to 60 percent of all mishaps, and is therefore the single greatest mishap hazard. Yet, simply writing off mishaps to "operator error" is a simplistic, if not naïve, approach to mishap causation and hazard identification. Further, it is well established that mishaps are rarely attributed to a single cause, or in most instances, even a single individual. Rather, mishaps are the end result of myriad latent failures or conditions that precede active failures (Shappell in "*The Naval Flight Surgeon's Pocket Reference to Aircraft Mishap Investigation*"). The goal of a mishap or event investigation is to identify these failures and conditions in order to understand why the mishap occurred and how it might be prevented from happening again.

This reference is an adjunct to formal instructions that govern mishap investigation and is not meant to supplant the other references that address service-specific guidance for mishap investigation. Use this guide as a ready reference in the field to ensure that your data retrieval is complete and that you preserve perishable evidence. This guide is also designed to ensure uniformity of inter-service human factors definitions and data driven analysis.

Description

This guide is designed for use as a comprehensive event/mishap, human error investigation, data identification, analysis and classification tool. It is designed for use by all members of an investigation board in order to accurately capture and recreate the complex layers of human error in context with the individual, environment, team and mishap or event.

In the past, investigators have thrown human factors analysis to the medical investigator and have asked him or her to do this work on their own. This practice has sometimes produced human error analyses that differed considerably from the boards' investigation and findings of fact. Integrating human factors analysis into all aspects of the investigation will result in a much more coherent final product.

As described by Reason (1990), *active failures* are the actions or inactions of operators that are believed to cause the mishap. Traditionally referred to as "error", they are the last "acts" committed by individuals, often with immediate and tragic consequences. For example, an aviator forgetting to lower the landing gear before touchdown or showing off through a box canyon will yield relatively immediate, and potentially grave, consequences.

In contrast, *latent failures* or *conditions* are errors that exist within the organization or elsewhere in the supervisory chain of command that effect the tragic sequence of events characteristic of a mishap. For example, it is not difficult to understand how tasking crews or teams at the expense of quality crew rest can lead to fatigue and ultimately errors (active failures) in the cockpit. Viewed from this perspective then, the actions of individuals are the end result of a chain of factors originating in other parts (often the upper echelons) of the organization. The problem is that these latent failures or conditions may lie dormant or undetected for some period of time prior to their manifestation as a mishap.

The question for mishap investigators and analysts alike is how to identify and mitigate these active and latent failures or conditions. One approach is the "Domino Theory" which promotes the idea that, like dominoes stacked in sequence, mishaps are the end result of a series of errors made throughout the chain of command.

A "modernized" version of the domino theory is Reason's "Swiss Cheese" model that describes the levels at which active failures and latent failures/conditions may occur within complex operations (see figure 1). Working backward from the mishap, the first level of Reason's model depicts those *Unsafe Acts of Operators* (operator, maintainers, facility personnel, etc.) that lead to a mishap. Traditionally, this is where most mishap investigations have focused their examination of human error, and consequently where most causal factors are uncovered. After all, it is typically the actions or inactions of individuals that can be directly linked to the mishap. Still, to stop the investigation here only uncovers part of the story.

What makes Reason's model particularly useful in mishap investigation is that it forces investigators to address latent failures and conditions within the causal sequence of events.

For instance, latent failures or conditions such as fatigue, complacency, illness, and the physical/technological environment all affect performance but can be overlooked by investigators with even the best of intentions.

These particular latent failures and conditions are described within the context of Reason's model as *Preconditions for Unsafe Acts*. Likewise, *Supervision* can promote unsafe conditions of operators and ultimately unsafe acts will occur. For example, if an Operations Officer were to pair a below average team leader with a very junior/inexperienced crew, the result is increased risk of mission failure. Regardless, whenever a mishap does occur, the crew naturally bears a part of the responsibility and accountability. However, latent failures or conditions at the supervisory level are often equally responsible for poor hazard analysis and subsequent increased mission risk, and may ultimately cause the mishap. In this particular example, the crew was set up for the opportunity for failure.

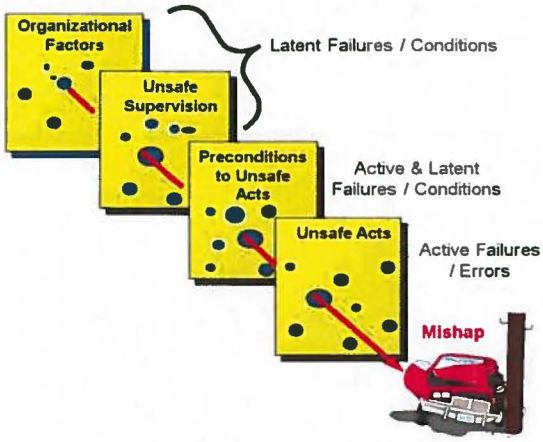


figure 1. The "Swiss Cheese" Model (adapted from Reason, 1990)

Reason's model does not stop at supervision; it also considers *Organizational Influences* that can impact performance at all levels. For instance, in times of fiscal constraints, funding may be short and may lead to limited training opportunities. Supervisors are sometimes pressed to task "non-proficient" crews with complex missions. Not surprisingly, unintended and unrecognized errors may appear, and mission performance will consequently suffer. As such, hazards and risks at all levels must be addressed if any mishap investigation process is going to be effective.

The investigation process then endeavors to detect and identify the "holes (*hazards*) in the cheese" (see figure 1). So how do we identify these hazards? *Aren't they really too numerous to define? After all, every mishap is unique, so the hazards will always be different for each mishap ... right?* Well, it turns out that each mishap is not unique from its predecessors. In fact, most mishaps have very similar causes. They are due to the same holes in the cheese, so to speak. The hazards identified in each new mishap are not unique to that mishap. Therefore, if you know what these system failures/hazards or "holes" are, you can better identify their roles in mishaps -- or better yet, detect their presence and develop a risk mitigation strategy correcting them **before** a mishap occurs.

Drawing upon Reason's (1990) and Wiegmann and Shappell's (2003) concept of active failures and latent failures/conditions, a new DoD taxonomy was developed to identify hazards and risks called the DoD Human Factors Analysis and Classification System. DoD-HFACS describes four main tiers of failures/conditions:

1) Acts,
2) Preconditions,
3) Supervision, and
4) Organizational Influences

A brief description of the major tiers with associated categories and sub-categories follows, beginning with the tier most closely tied to the mishap.

Attachment 1 is the in-depth reference document, and contains all the currently accepted definitions for the sub codes that fall within the 4 major tiers of human error. This document is subject to review and update every 6 months by the Human Factors Working Group of the Joint Services Safety Chiefs. For comments please contact the Command Flight Surgeon of the Naval Safety Center.

Version 7.0 (2014)

Note *In the electronic version of this document each of the HFACS Model boxes are hyper-linked to more in-depth descriptions*

DoD HFACS 7.0 Nanocodes (definitions): After any event investigators must gather human factors evidence. One method to do this is to start with the event outcome and create a time line documenting each step that leads up to the event. As you probe backwards determine whether a material (a part failed) event occurred or an individual committed or failed to commit an act the resulted in the outcome event.

At each step the investigator must document who committed the act then utilize the taxonomy to further classify the act. Once the investigator has identified the nanocode that reflects the act he/she must dig deeper.

The next step is to look evaluate the preconditions that resulted in the unsafe act. A method that may help evaluating preconditions is to review each of the categories and sub categories in this tier of HFACS and rule in or eliminate the various preconditions that lead to the act. Once the investigator has fully devolved into the preconditions and has recorded all preconditions for the act the focus must move on to supervisory and subsequent organizational issues that contributed to the precondition.

It is recommend that for each nanocode chosen the investigator write a short narrative discussing the nanocode, then conduct an evaluation of each item in the time line. This should give the investigator a thorough human factors picture of all the events that led up to the mishap.

1. **Unsafe Acts:** Acts are *those factors that are most closely tied to the mishap, and can be described as active failures or actions committed by the operator* that result in human error or unsafe situation. We have identified these active failures or actions as Errors and Violations.

   Using this error analysis process, the investigator must first determine if an individual or team committed an active failure. If so, the investigator must then decide if an error or violation occurred. Once this is done, the investigator can further define the error. (See Table 1).

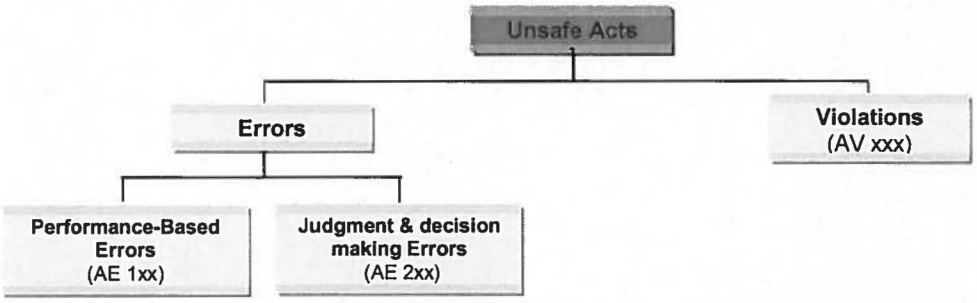


Table 1. Categories of Acts of Operators

Errors: are factors in a mishap when mental or physical activities of the operator fail to achieve their intended outcome as a result of performance-based or judgment and decision making errors, leading to an unsafe situation. *Errors are unintended*.

Violations: Violations are factors in a mishap when the actions of the operator represent *willful disregard for rules and instructions* and lead to an unsafe situation. Unlike errors, violations are deliberate. (Table 1a)

Enclosure (1)

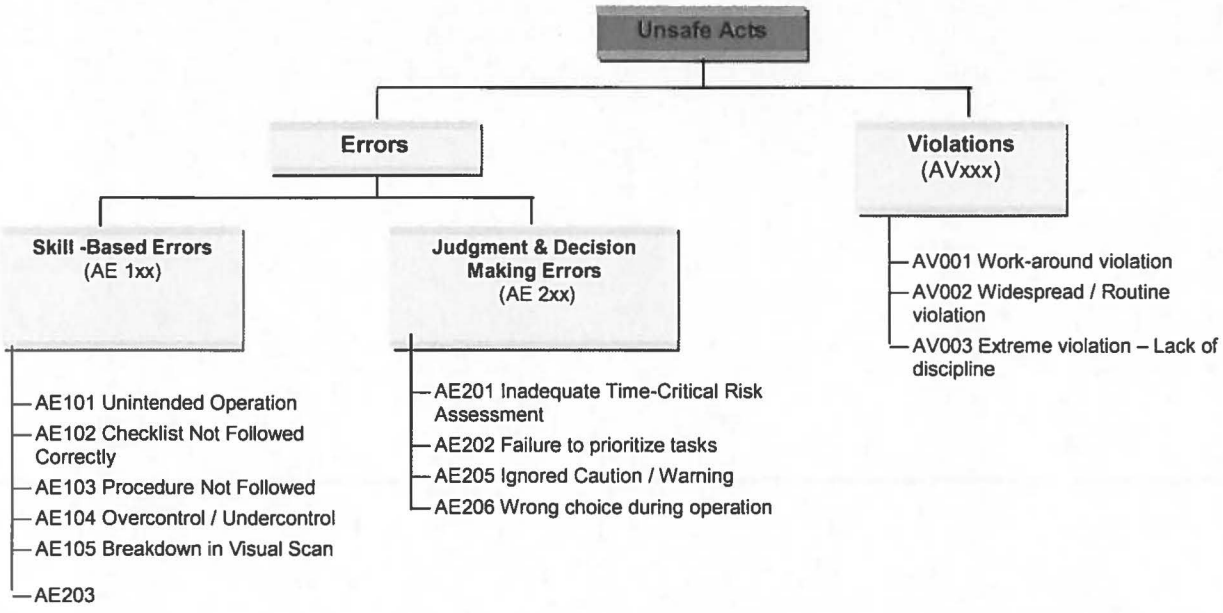


Table 1a Unsafe Acts

Performance / Skill - Based Errors: are factors that occur when a specific action is performed in a manner that leads to a mishap. (In other words, when errors occur in the operator's execution of a routine, highly practiced task relating to procedure, training or proficiency and result in an unsafe a situation.)

- **AE101 Unintended Operation of Equipment:** is a factor when an individual's movements inadvertently activate or deactivate equipment, controls or switches when there is no intent to operate the control or device. This action may be noticed or unnoticed by the individual.
- **AE102 Checklist Not Followed Correctly:** is a factor when the individual, either through an act of commission or omission makes a checklist error or fails to run an appropriate checklist.
- **AE103 Procedure Not Followed Correctly:** is a factor when a procedure is accomplished incorrectly or in the wrong sequence or using the wrong technique.
- **AE104 Over-control / Under-control of the Vehicle or System:** is a factor when an individual responds inappropriately to conditions by either over controlling or under controlling the aircraft/vehicle or system. The error may be a result of preconditions or a temporary failure of coordination.
- **AE105 Breakdown in Visual Scan:** is a factor when the individual fails to effectively execute learned / practiced visual scan patterns.
- **AE203 Rushed or Delayed a Necessary Action:** is a factor when an individual takes the necessary action as dictated by the situation but performs these actions too quickly or too slowly.

Judgment and Decision-Making Errors: are factors that occur when an individual proceeds as intended, yet the plan proves inadequate or inappropriate for the situation, "An honest mistake."

- **AE201 Inadequate Real-Time / Time-Critical Risk Assessment:** is a factor when an individual fails to adequately evaluate the risks associated with a particular course of action and this faulty evaluation leads to inappropriate decision-making and subsequent unsafe situations.
- **AE202 Failure to Prioritize Tasks Adequately:** is a factor when the individual does not organize, based on accepted prioritization techniques, the tasks needed to manage the immediate situation.
- **AE205 Ignored a Caution / Warning:** is a factor when a caution or warning is perceived and understood by the individual but is ignored by the individual.
- **AE206 Wrong Choice of Action during Operation:** is a factor when the individual, through faulty logic or erroneous expectations, selects the wrong course of action.

Violations: are factors when an individual *intentionally (willful disregard)* breaks the rules and instructions. Violations are deliberate.

- **AV001 Performs Work-around Violation:** is a factor when the consequences/risk of violating published procedures was recognized, consciously assessed and honestly determined by the individual, crew or team to be the best course of action. Routine "work-arounds" and unofficial procedures that are accepted by the community as necessary for operations are also captured under this code.
- **AV002 Commits Routine / Widespread Violation:** is a factor when a procedure or policy violation is systemic in a unit/setting and not based on a risk assessment for a specific situation. It needlessly commits the individual, team, or crew to an unsafe course-of-action. These violations may have leadership sanction and may not routinely result in disciplinary/administrative action. Habitual violations of a single individual or small group of individuals within a unit can constitute a routine/widespread violation if the violation was not routinely disciplined or was condoned by supervisors.
- **AV003 Extreme Violation - Lack of Discipline:** is a factor when an individual, crew or team intentionally violates procedures or policies without cause or need. These violations are unusual or isolated to specific individuals rather than larger groups. There is no evidence of these violations being condoned by leadership. These violations may also be referred to as "exceptional violations." (NOTE: These violations may also carry UCMJ consequences. Boards should consult the Judge Advocate of the convening authority.)

2. Preconditions: Preconditions are *factors in a mishap if active and/or latent preconditions such as conditions of the operators, environmental or personnel factors affect practices, conditions or actions of individuals and result in human error or an unsafe situation* (Table 2). In this error analysis model preconditions include *Environmental Factors*, *Condition of the Individuals* and *Personnel Factors*.

Note: ~67% of HFACS codes are in Preconditions

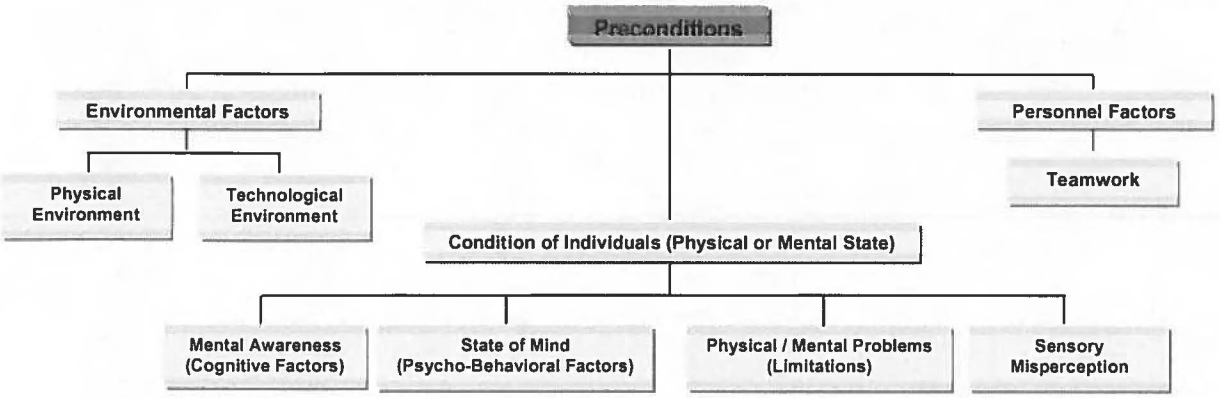


Table 2. Categories of Preconditions for Unsafe Acts

Preconditions - *Environmental Factors:* Are factors in a mishap if *physical* or *technological* factors affect practices, conditions, and actions of an individual and result in human error or an unsafe situation. Environmental factors include:

Physical Environment (PE100): (Table 2a)

Technological Environment (PE200): (Table 2a)

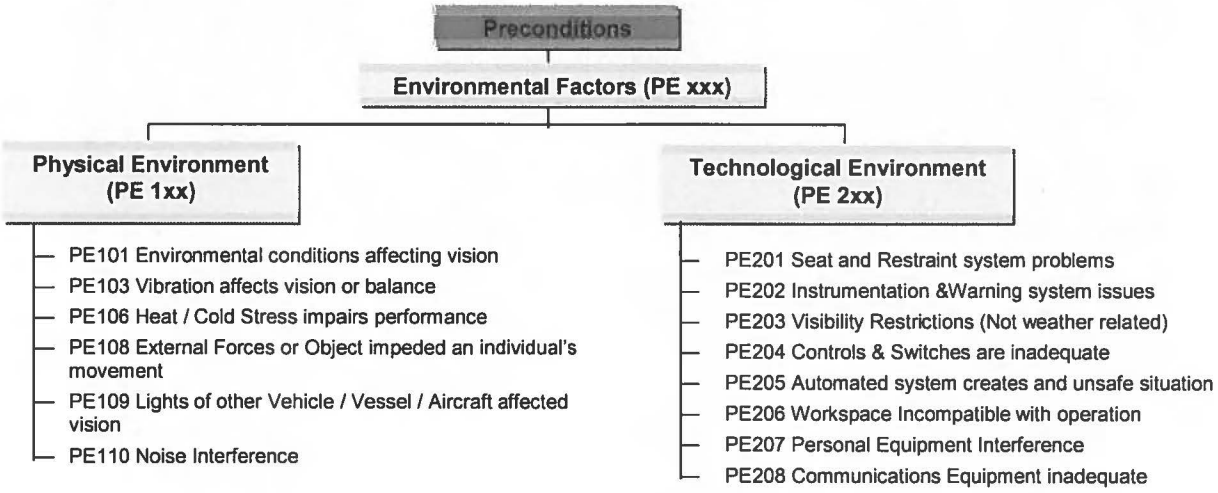


Table 2a. Environmental Factors

Preconditions - Environmental Factors

Physical Environment: Are factors in a mishap if environment such as weather, climate, fog, brownout (dust or sand storm) or white out (snow storm) that affect the actions of individuals.

- **PE101 Environmental Conditions Affecting Vision:** is a factor that includes obscured windows; weather, fog, haze, darkness; smoke, etc.; brownout/whiteout (dust, snow, water, ash or other particulates); or when exposure to windblast affects the individual's ability to perform required duties.
- **PE103 Vibration Affects Vision or Balance:** is a factor when the intensity or duration of the vibration is sufficient to cause impairment of vision or adversely affect balance.
- **PE106 Heat / Cold Stress Impairs Performance:** is a factor when the individual is exposed to conditions resulting in compromised performance.
- **PE108 External force or Object Impeded an Individual's Movement:** t is a factor when acceleration forces of longer than one second cause injury, prevent or interfere with the performance of normal duties. Do not use this code to capture G-induced loss of consciousness
- **PE109 Lights of Other Vehicle / Vessel / Aircraft Affected Vision:** is a factor when the absence, pattern, intensity or location of the lighting of other vehicle/vessel/aircraft prevents or interferes with safe task accomplishment.
- **PE110 Noise Interference:** is a factor when any sound not directly related to information needed for task accomplishment interferes with the individual's ability to perform that task.

Technological Environment: Are factors in a mishap when cockpit / vehicle / control station / workspace design factors or automation affect the actions of individuals and result in human error or an unsafe situation.

- **PE201 Seat and Restraint System Problems:** is a factor when the design of the seat or restraint system, the ejection system or seat comfort has poor impact-protection qualities.
- **PE202 Instrumentation and Warning System Issues:** is a factor when instrument factors such as design, reliability, lighting, location, symbology, size, display systems, auditory or tactile situational awareness or warning systems create an unsafe situation.
- **PE203 Visibility Restrictions (not weather related):** is a factor when the lighting system, windshield/windscreen/canopy design, or other obstructions prevent necessary visibility. This includes glare or reflections on the windshield/windscreen/canopy. Visibility restrictions due to weather or environmental conditions are captured under PE101.
- **PE204 Controls and Switches are Inadequate:** is a factor when the location, shape, size, design, reliability, lighting or other aspect of a control or switch are inadequate.
- **PE205 Automated System Creates an Unsafe Situation**: is a factor when the design, function, reliability, symbology, logic or other aspect of automated systems creates an unsafe situation.
- **PE206 Workspace Incompatible with Operation:** is a factor when the workspace is incompatible with the task requirements and safety for an individual.
- **PE207 Personal Equipment Interference:** is a factor when the individual's personal equipment interferes with normal duties or safety.
- **PE208 Communication Equipment Inadequate:** is a factor when communication equipment is inadequate or unavailable to support task demands. This includes electronically or physically blocked transmissions. Communications can be voice, data or multi-sensory.

Preconditions - *Condition of Individuals / Physical or Mental State*: Are factors in a mishap if cognitive, psycho-behavioral, adverse physical state, or physical/mental limitations affect practices, conditions or actions of individuals and result in human error or an unsafe situation. Condition of the Individuals include:

Mental Awareness (PCxxx): (Table 2b)

State of Mind (PC2xx) (Table 2b)

Physical Problems (PCxxx) (Table 2c)

Sensory Misperception (PC5xx) (Table 2c)

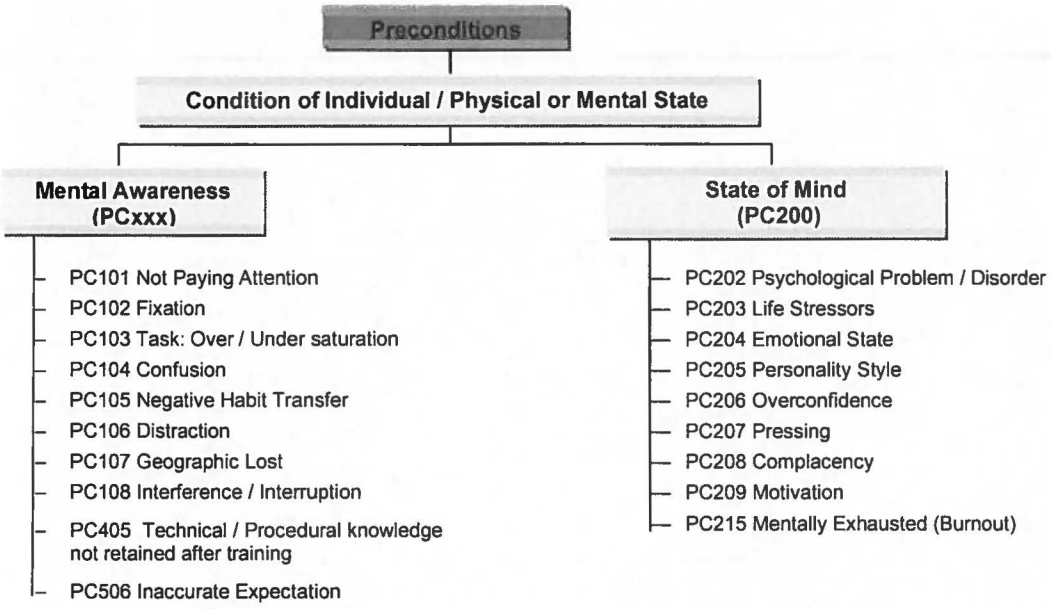


Table 2b. Preconditions - Conditions of the Individual

Preconditions - Condition of Individuals

Mental Awareness (Cognitive Factors): Are factors in a mishap if cognitive or attention management conditions affect the perception or performance of individuals.

- **PC101 Not Paying Attention**: is a factor when there is a lack of state of alertness or a readiness to process immediately available information. The individual has a state of reduced conscious attention due to a sense of security, self-confidence, boredom or a perceived absence of threat from the environment. This may often be a result of highly repetitive tasks.
- **PC102 Fixation:** is a factor when the individual is focusing all conscious attention on a limited number of environmental cues to the exclusion of others.
- **PC103 Task Over-Saturation / Under-Saturation:** is a factor when the quantity of information an individual must process exceeds their mental resources in the amount of time available to process the information.

- **PC104 Confusion:** is a factor when the individual is unable to maintain a cohesive and orderly awareness of events and required actions and experiences a state characterized by bewilderment, lack of clear thinking or (sometimes) perceptual disorientation.
- **PC105 Negative Habit Transfer:** is a factor when the individual reverts to a highly learned behavior used in a previous system or situation and that response is inappropriate for current task demands.
- **PC106 Distraction:** is a factor when the individual has an interruption of attention and/or inappropriate redirection of attention by an environmental cue or mental process.
- **PC107 Geographically Lost:** is a factor when the individual is at a different location from where one believes they are.
- **PC108 Interference / Interruption:** is a factor when an individual is performing a highly automated/learned task and is distracted by another cue/event that results in the interruption and subsequent failure to complete the original task or results in skipping steps in the original task.
- **PC405 Technical or Procedural Knowledge Not Retained after Training:** is a factor when the individual fails to absorb/retain required information or is unable to recall past experience needed for safe task completion.
- **PC506 Inaccurate Expectation:** is a factor when the individual expects to perceive a certain reality and those expectations are strong enough to create a false perception of the expectation.

State of Mind (Psycho-Behavioral Factors): Are factors when an individual's personality traits, psychosocial problems, psychological disorders or inappropriate motivation creates an unsafe situation.

- **PC202 Psychological Problem:** is a factor when the individual met medical criteria for a psychiatric disorder.
- **PC203 Life Stressors:** is a factor when the individual's performance is affected by life circumstance problems (includes relationship issues, financial stressors, recent move, etc.).
- **PC204 Emotional State:** is a factor when the individual is under the influence of a strong positive or negative emotion and that emotion interferes with duties.
- **PC205 Personality Style:** is a factor when the individual's personal interaction with others creates an unsafe situation. Examples are authoritarian, over-conservative, impulsive, invulnerable, submissive or other personality traits that result in degraded performance.
- **PC206 Overconfidence:** is a factor when the individual overvalues or overestimates personal capability, the capability of others or the capability of aircraft/vehicles or equipment.
- **PC207 Pressing:** is a factor when the individual knowingly commits to a course of action that excessively presses the individual and/or their equipment beyond reasonable limits (e.g., pushing self or equipment too hard).
- **PC208 Complacency:** is a factor when the individual has a false sense of security, is unaware of, or ignores hazards and is inattentive to risks.
- **PC209 Motivation**: is a factor when the individual's motivation to accomplish a task/mission is excessive, weak, indecisive or when personal goals supersede the organization's goals.
- **PC215 Mentally Exhausted (Burnout):** is a factor when the individual has the type of exhaustion associated with the wearing effects of high operational and/or lifestyle tempo in which operational requirements impinge on the ability to satisfy personal requirements and leads to degraded effectiveness.

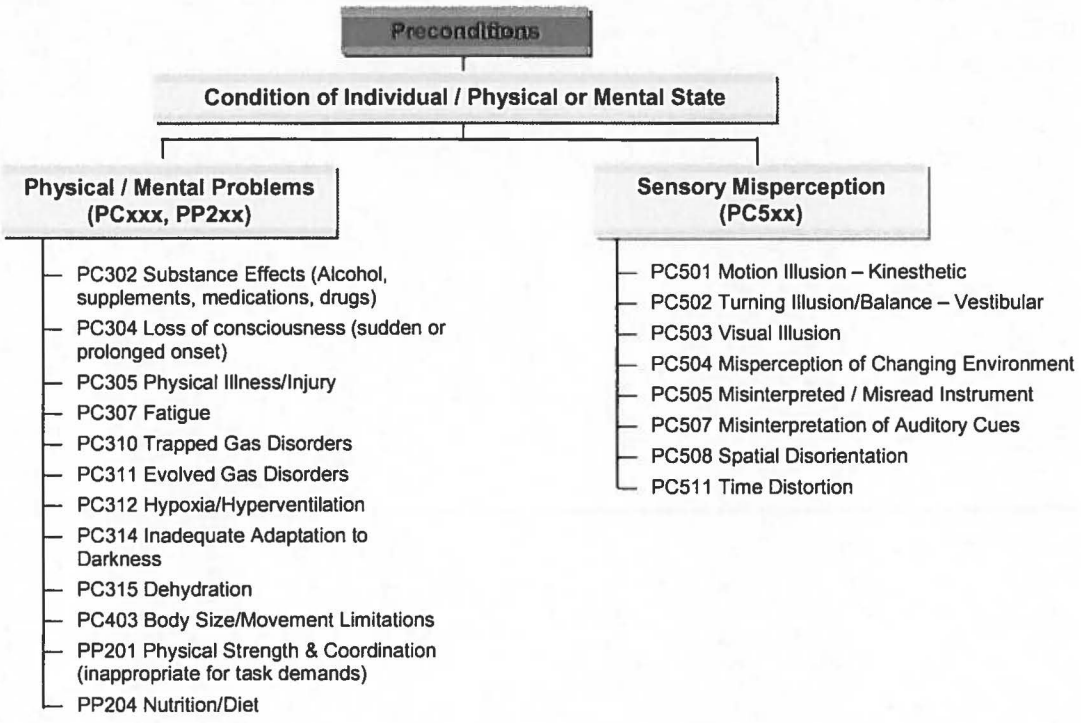


Table 2c. Conditions of individuals

Preconditions - Condition of Individuals

Physical Problems: Are factors when an individual experiences a physiologic event that compromises human performance and this decreases performance and results in an unsafe situation.

- **PC302 Substance Effects (alcohol, supplements, medications, drugs):** is a factor when the individual uses legal or illegal drugs, supplements, energy drinks, or any other substance with measurable effect that interferes with performance.
- **PC304 Loss of Consciousness (sudden or prolonged onset):** is a factor when the individual has a loss of functional capacity/consciousness due to G-LOC, seizure, trauma or any other cause.
- **PC305 Physical Illness / Injury:** is a factor when a physical illness, injury, deficit or diminished physical capability causes an unsafe situation. This includes pre-existing and operationally-related medical conditions, over-exertion, motion sickness, etc.
- **PC307 Fatigue:** is a factor causing diminished physical / mental capability resulting from chronic or acute periods of prolonged wakefulness, sleep deprivation, jet lag, shift work or poor sleep habits.
- **PC310 Trapped Gas Disorders:** is a factor when gasses in the middle ear, sinuses, teeth or intestinal tract expand or contracts. Also capture alternobaric *(dizziness from unequal pressures)* vertigo for diving or aviation under this code.
- **PC311 Evolved Gas Disorders:** is a factor when inert-gas evolves in the blood causing an unsafe situation. This includes chokes, CNS, bends, paresthesia *(a sensation of pricking, tingling, or creeping on the skin)* or other conditions caused by inert-gas evolution.

- **PC312 Hypoxia / Hyperventilation:** is a factor when the individual has insufficient oxygen supply to the body and/or breathing above physiological demands causes impaired function.
- **PC314 Inadequate Adaptation to Darkness:** is a factor when the normal human limitation of dark-adaptation rate affects safety, for example, when transitioning between aided and unaided night vision.
- **PC315 Dehydration:** is a factor when the performance of the individual is degraded due to dehydration as a result of excessive fluid losses due to heat stress or due to insufficient fluid intake.
- **PC403 Body Size / Movement Limitations:** is a factor when the size, strength, dexterity, mobility or other biomechanical limitations of an individual creates an unsafe situation. It must be expected that the average individual qualified for that duty position could accomplish the task in question.
- **PP201 Physical Strength & Coordination (inappropriate for task demands):** is a factor when the relative physical strength and/or coordination of the individual is not adequate to support task demands.
- **PP204 Nutrition/Diet:** is a factor when the individual's nutritional state or poor dietary practices are inadequate to fuel the brain and body functions resulting in degraded performance.

Sensory Misperception: are factors resulting in degraded sensory inputs (visual, auditory or vestibular) that create a misperception of an object, threat or situation.

- **PC501 Motion Illusion – Kinesthetic**: is a factor when physical sensations of the ligaments, muscles or joints cause the individual to have an erroneous perception of orientation, motion or acceleration. (If this illusion leads to spatial disorientation you must code PC508.)
- **PC502 Turning/Balance Illusion – Vestibular:** is a factor when stimuli acting on the balance organs in the middle ear cause the individual to have an erroneous perception of orientation, motion or acceleration. (If this illusion leads to spatial disorientation you must code PC508.)
- **PC503 Visual Illusion**: is a factor when visual stimuli result in an erroneous perception of orientation, motion or acceleration. (If this illusion leads to spatial disorientation you must code PC508.)
- **PC504 Misperception of Changing Environment:** is a factor when an individual misperceives or misjudges altitude, separation, speed, closure rate, and road / sea conditions, or vehicle / aircraft location within the performance envelope or other operational conditions.
- **PC505 Misinterpreted / Misread Instrument:** is a factor when the individual is presented with a correct instrument reading but its significance is not recognized, it is misread or is misinterpreted.
- **PC507 Misinterpretation of Auditory / Sound Cues:** is a factor when the auditory inputs are correctly interpreted but are misleading/disorienting or, when the inputs are incorrectly interpreted and cause an impairment of normal performance.
- **PC508 Spatial Disorientation:** is a factor when an individual fails to correctly sense a position, motion or attitude of the aircraft/vehicle/vessel or of oneself. Spatial Disorientation may be unrecognized and/or result in partial or total incapacitation.
- **PC511 Temporal / Time Distortion:** is a factor when the individual experiences a compression or expansion of time relative to reality. This is often associated with a "fight or flight" response.

Preconditions - *Personnel Factors:* Personnel factors are factors in a mishap if crew resource management affects practices, conditions or actions of individuals, and result in human error or an unsafe situation.

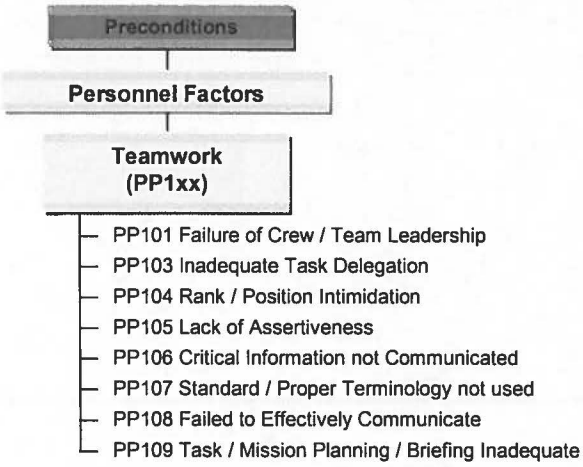


Table 2d. Personal Factors

Teamwork: Refer to interactions among individuals, crews, and teams involved with the preparation and execution of a mission that resulted in human error or an unsafe situation.

- **PP101 Failure of Crew / Team Leadership:** is a factor when the crew/team leadership techniques failed to facilitate a proper crew/team climate, to include establishing and maintaining an accurate and shared understanding of the evolving task and plan on the part of all crew/team members.
- **PP103 Inadequate Task Delegation:** is a factor when the crew/team members failed to actively manage the distribution of tasks to prevent the overloading of any individual member.
- **PP104 Rank / Position Intimidation:** is a factor when the differences in rank of the team/crew caused the task performance capabilities to be degraded. Also, conditions where formal or informal authority gradient is too steep or too flat across a crew/team and this condition degrades collective or individual performance.
- **PP105 Lack of Assertiveness:** is a factor when an individual failed to state critical information or solutions with appropriate persistence and/or confidence.
- **PP106 Critical Information Not Communicated:** is a factor when known critical information was not provided to appropriate individuals in an accurate or timely manner.
- **PP107 Standard / Proper Terminology Not Used:** is a factor when clear and concise terms, phrases, hand signals, etc. per service standards and training were not used.
- **PP108 Failed to Effectively Communicate:** is a factor when communication is not understood or is misinterpreted as the result of behavior of either sender or receiver. Communication failed to include backing up, supportive feedback or acknowledgement to ensure that personnel correctly understood announcements or directives.
- **PP109 Task/Mission Planning/Briefing Inadequate:** is a factor when an individual, crew or team failed to complete all preparatory tasks associated with planning/briefing the task/mission.

3. **Unsafe Supervision:** Supervision is a factor in a mishap if the methods, decisions or policies of the supervisory chain of command directly affect practices, conditions or actions of the individual(s). The DoD Human Factors Working Group has determined that a mishap event can often be traced back to the supervisory chain of command. Unsafe Supervision divided into three major categories as follows:

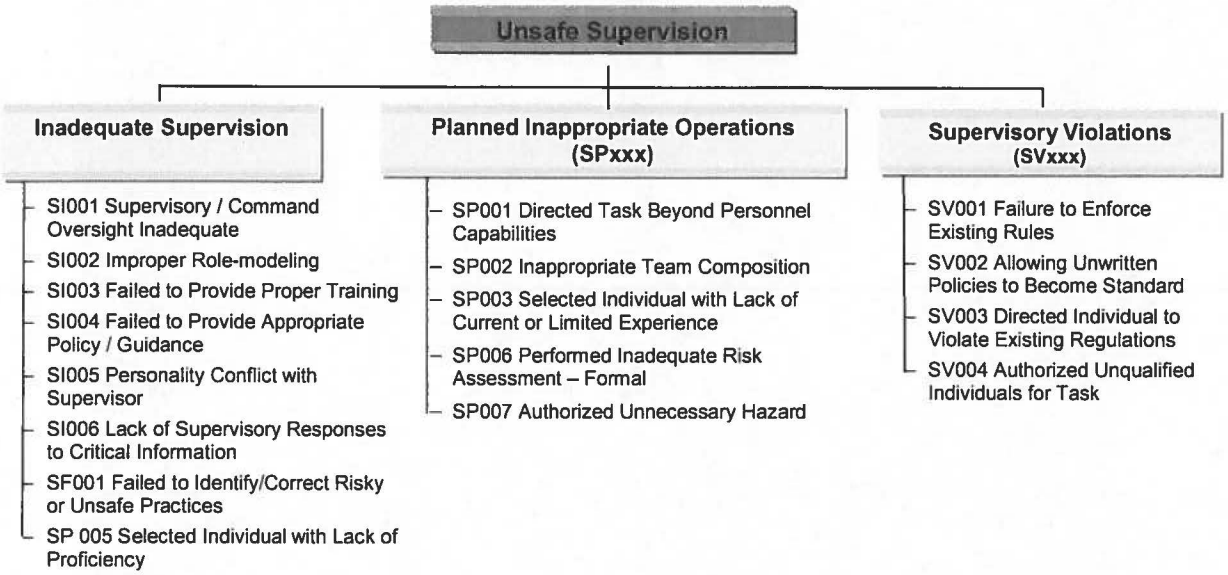


Table 3. Categories of Unsafe Supervision

Inadequate Supervision: are factors when section / department / platoon level or unit / command level supervision proves inappropriate or improper and/or fails to identify hazards, recognize and control risk, provide guidance, training and/or oversight and results in human error or an unsafe situation.

The role of supervisors is to provide their personnel with the opportunity to succeed. To do this, supervisors must provide guidance, training opportunities, leadership, motivation, and the proper role model, regardless of their supervisory level. Unfortunately, this is not always the case. It is easy to imagine a situation where adequate Risk Management training was not provided to an operator or team member. Conceivably, the operator's coordination skills would be compromised, and if put into a non-routine situation (e.g., emergency), would be at risk for errors that might lead to a mishap. Therefore, the category Inadequate Supervision accounts for those times when supervision proves inappropriate, improper, or may not occur at all (see Table 3).

- **SI001 Supervisory / Command Oversight Inadequate:** is a factor when the availability, competency, quality or timeliness of leadership, supervision or oversight does not meet task demands. *Inappropriate supervisory pressures are also captured under this code.*
- **SI002 Improper Role-Modeling:** is a factor when the individual's learning is influenced by the behavior of supervisors and when that learning manifests itself in actions that are either inappropriate to the individual's skill level or violate standard procedures.

- **SI003 Failed to Provide Proper Training:** is a factor when one-time or recurrent training programs, upgrade programs, transition programs or any other local training is inadequate or unavailable, etc. *(Note: the failure of an individual to absorb the training material in an adequate training program does not indicate a training program problem.)*
- **SI004 Failed to Provide Appropriate Policy / Guidance:** is a factor when policy/guidance or lack of a policy/guidance leads to an unsafe situation.
- **SI005 Personality Conflict with Supervisor:** is a factor when a supervisor and individual member experience a "personality conflict" that leads to a dangerous error in judgment/action.
- **SI006 Lack of Supervisory Responses to Critical Information:** is a factor when information critical to a potential safety issue was provided but supervisory/management personnel failed to act upon it *(failure to close the loop).*
- **SF001 Failed to Identify / Correct Risky or Unsafe Practices:** is a factor when a supervisor fails to identify or correct risky behaviors or unsafe tendencies and/or fails to institute remedial actions. This includes hazardous practices, conditions or guidance.
- **SP005 Selected Individual with Lack of Proficiency:** is a factor when a supervisor selects an individual that is not proficient in a task, mission or event.

Planned Inappropriate Operations: Is a factor in a mishap when supervision fails to adequately assess the hazards associated with an operation and allows for unnecessary risk.

It is also a factor when supervision allows non-proficient or inexperienced personnel to attempt missions beyond their capability or when crew or flight makeup is inappropriate for the task or mission.

Occasionally, the operational tempo or schedule is planned such that individuals are put at unacceptable risk, crew rest is jeopardized, and ultimately performance is adversely affected. Such "Planned Inappropriate Operations", though arguably unavoidable during emergency situations, are not acceptable during normal operations.

Included in this category are issues of crew pairing and improper manning. For example, it is not surprising to anyone that problems can arise when two individuals with marginal skills are paired together. During a period of downsizing and/or increased levels of operational commitment, it is often more difficult to manage crews. However, pairing weak or inexperienced operators together on the most difficult missions may not be prudent

- **SP001 Directed Task Beyond Personnel Capabilities:** is a factor when supervisor/management directs personnel to undertake a task beyond their skill level or beyond the capabilities of their equipment.
- **SP002 Inappropriate Team Composition:** is a factor when the makeup of the crew/team should have reasonably raised safety concerns in the minds of members involved in the task, or in any other individual directly related to the scheduling of this task.
- **SP003 Selected Individual with Lack of Current or Limited Experience:** is a factor when the supervisor selects an individual whose experience is not sufficiently current or proficient to permit safe task execution.
- **SP006 Performed Inadequate Risk Assessment – Formal:** is a factor when supervision does not adequately evaluate the risks associated with a task or when pre-mission risk assessment tools/programs are inadequate.
- **SP007 Authorized Unnecessary Hazard:** is a factor when supervision authorizes an activity or task that is unnecessarily hazardous without sufficient cause or need.

Supervisory Violations: Is a factor in a mishap when supervision willfully disregards instructions, guidance, rules, or operating instructions and this lack of supervisory responsibility creates an unsafe situation.

For instance, a supervisor knowingly permits an individual to operate a vehicle or piece of equipment without being qualified is a flagrant violation that invariably sets the stage for the tragic sequence of events that predictably follow.

- **SV001 Failure to Enforce Existing Rules (supervisory act of omission):** is a factor when unit (organizational) and operating rules have not been enforced by a supervisor
- **SV002 Allowing Unwritten Policies to Become Standard:** is a factor when unwritten or "unofficial" policy is perceived and followed by the individual, although it has not been formally recognized by the organization.
- **SV003 Directed Individual to Violate Existing Regulations:** is a factor when a supervisor directs a subordinate to violate existing regulations, instructions or technical guidance.
- **SV004 Authorized Unqualified Individuals for Task:** is a factor when an individual has not met the general training requirements for the job/weapon system and is considered non-current but supervision/leadership inappropriately allows the individual to perform the task for which the individual is non-current.

4. **Organizational Influences:** Are factors in a mishap where "command level" and/or "upper-level management" may have contributed to the mishap. Fallible decisions of upper-level management directly affect supervisory practices, as well as the conditions and actions of operators. These latent conditions generally involve issues related to *Problems with Resource / Acquisition Management, Personnel Selection and Training issues, Organizational Climate influences,* and *Policy and Processes issues.*

Did policies, communications, actions, or omissions of upper-level management directly or indirectly affect supervisory practices, conditions, or actions of the operator(s) and result in system failure?

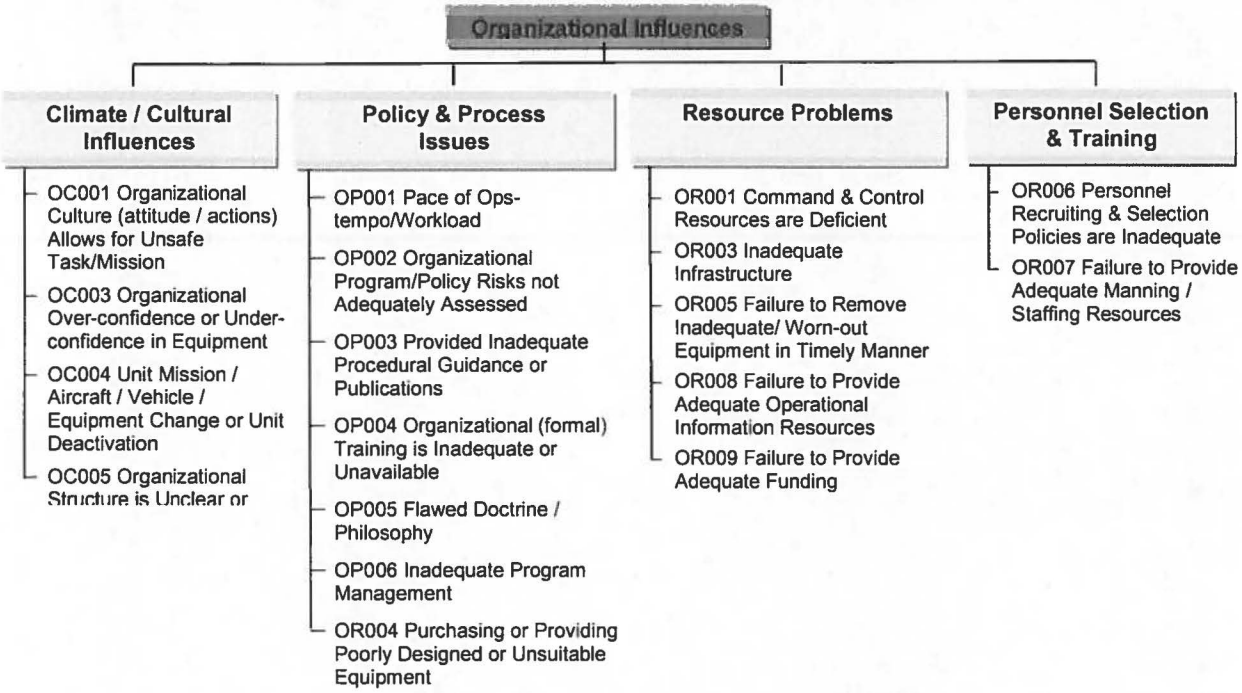


Table 4. Categories of Organizational Influences

Organizational Climate / Culture Influences: Are factors where the working atmosphere within the organization influences individual actions resulting in human error. (E.g. command structure, policies, and working environment). *Organizational Climate* refers to a broad class of organizational variables that influence worker performance. It can be defined as the situational consistencies in the organization's treatment of individuals. In general, Organizational Climate is the prevailing atmosphere or environment within the organization. Within the present classification system, climate is broken down into three categories--structure, policies, and culture.

The term "structure" refers to the formal component of the organization. The "form and shape" of an organization are reflected in the chain-of-command, delegation of authority and responsibility, communication channels, and formal accountability for actions. Organizations with maladaptive structures (i.e., those that do not optimally match to their operational environment or are unwilling to change) will be more prone to mishaps.

"Policies" refer to a course or method of action that guides present and future decisions. Policies may refer to hiring and firing, promotion, retention, raises, sick leave, drugs and alcohol, overtime, mishap investigations, use of safety equipment, etc. When these policies are ill-defined, adversarial, or conflicting, safety may be reduced.

Finally, "culture" refers to the unspoken or unofficial rules, values, attitudes, beliefs, and customs of an organization ***("The way things really get done around here.").*** Other issues related to culture include organizational justice, psychological contracts, organizational citizenship behavior, ***esprit de corps***, and union / management relations. All these issues affect attitudes about safety and the value of a safe working environment.

- **OC001 Organizational Culture (attitude/actions) Allows for Unsafe Task/Mission:** a factor when explicit/implicit actions, statements or attitudes of unit leadership set unit/organizational values (culture) that allow an environment where unsafe task/mission demands or pressures exist.
- **OC003 Organizational Over-confidence or Under-confidence in Equipment:** is a factor when there is organizational over- or under-confidence in an aircraft, vehicle, device, system or any other equipment.
- **OC004 Unit Mission/Aircraft/Vehicle/Equipment Change or Unit Deactivation:** is a factor when the process of changing missions, aircraft/vehicle/equipment or an impending unit deactivation creates an unsafe situation.
- **OC005 Organizational Structure is Unclear or Inadequate:** is a factor when the chain of command of an individual or structure of an organization is confusing, non-standard or inadequate and this creates an unsafe situation.

Organizational Policy and Processes Issues: Are factors if organizational processes negatively influence performance and result in an unsafe situation or human error. This includes operational risk management practices, procedures, and oversights which negatively influence individual, supervisory, and/or team performance and results in unrecognized hazards and/or uncontrolled risk.

This category refers to the formal process by which *"things get done"* in the organization. It is subdivided into three broad categories--operations, procedures, and oversight. T

The term *"operations"* refers to the characteristics or conditions of work that have been established by management. These characteristics include operational tempo, time pressures, production quotas, incentive systems, and schedules. When set up inappropriately, these working conditions can be detrimental to safety.

"Procedures" are the official or formal procedures as to how the job is to be done. Examples include performance standards, objectives, documentation, and instructions about procedures. All of these, if inadequate, can negatively impact employee supervision, performance, and safety.

Finally, *"oversight"* refers to monitoring and checking of resources, climate, and processes to ensure a safe and productive work environment. Issues here relate to organizational self-study, risk management, and the establishment and use of safety programs.

- **OP001 Pace of Ops-tempo/Workload:** is a factor when the pace of deployments, workload, additional duties, off-duty education, PME or other workload-inducing conditions of an individual or unit creates an unsafe situation.
- **OP002 Organizational Program/Policy Risks not Adequately Assessed:** is a factor when the potential risks of a large program, operation, acquisition or process are not adequately assessed and this inadequacy.
- **OP003 Provided Inadequate Procedural Guidance or Publications:** is a factor when written direction, checklists, graphic depictions, tables, charts or other published guidance is inadequate, misleading or inappropriate.
- **OP004 Organizational (formal) Training is Inadequate or Unavailable:** is a factor when one-time or initial training programs, upgrade programs, transition programs or other training that is conducted outside the local unit is inadequate or unavailable, etc.

- **OP005 Flawed Doctrine/Philosophy:** is a factor when the doctrine, philosophy or concept of operations in an organization is flawed or accepts unnecessary risk which leads to an unsafe situation or unmitigated hazard.
- **OP006 Inadequate Program Management:** is a factor when programs are implemented without sufficient support, oversight or planning.
- **OR004 Purchasing or Providing Poorly Designed or Unsuitable Equipment:** is a factor when the processes through which aircraft, vehicle, equipment or logistical support are acquired allows inadequacies or when design deficiencies allow inadequacies in the acquisition.

Resource Problems: Is a factor in a mishap if resource management, processes, or policies, directly or indirectly, influence system safety and results in inadequate management or creates an unsafe situation.

This category refers to the management, allocation, and maintenance of organizational resources, monetary, and equipment / facilities. "Funding" issues refer to the management of nonhuman resources, primarily monetary resources. For example, excessive cost cutting and lack of funding for proper equipment have adverse effects on operator performance and safety. Finally, "equipment" refers to issues related to equipment design, including the purchasing of unsuitable equipment, inadequate design of workspaces, and failures to correct known design flaws. Management should ensure that human-factors engineering principles are known and utilized and that existing specifications for equipment and workspace design are identified and met.

- **OR001 Command and Control Resources are Deficient:** is a factor when installation resources are inadequate for safe operations. Examples include: command and control, airfield services, battle-staff or battle-group management, etc.
- **OR003 Inadequate Infrastructure:** is a factor when support facilities (dining, exercise, quarters, medical care, etc.) or opportunity for recreation or rest are not available or adequate. This includes situations where leave is not taken for reasons other than the individual's choice.
- **OR005 Failure to Remove Inadequate/Worn-Out Equipment in a Timely Manner:** is a factor when the process through which equipment is removed from service is inadequate.
- **OR008 Failure to Provide Adequate Operational Information Resources:** is a factor when weather, intelligence, operational planning material or other information necessary for safe operations planning are not available.
- **OR009 Failure to Provide Adequate Funding:** is a factor when an organization or operation does not receive the financial resources to complete its assigned task/mission.

Personnel Selection & Training: are factors if personnel management processes or policies, directly or indirectly, influence system safety and results in inadequate error management or creates an unsafe situation. Issues that directly influence safety include selection (e.g. background checks), training, and staffing / manning.

- **OR006 Personnel Recruiting and Selection Policies are Inadequate:** is a factor when the process through which individuals are screened, brought into the service or placed into specialties is inadequate.
- **OR007 Failure to Provide Adequate Manning/Staffing Resources:** is a factor when the process through which manning, staffing or personnel placement or manning resource allocations are inadequate for task/mission demands.

manuals. MOS Community T&Rs shall adhere to the policy, content, sequence, and format requirements delineated herein. Aircraft maintenance MOS communities shall comply with the policies and processes of the AMTRP when developing or updating aircraft community T&R Manuals and when executing syllabus training and training management.

1.2. AIRCRAFT MAINTENANCE T&R PROGRAM:

1.2.1. General. The AMTRP implements a comprehensive, System Skills and Qualifications/Designations/Licensing (QDL)-based training system focused primarily on creating and sustaining requisite numbers of individuals who possess System Skill expertise and required QDLs necessary for sustained unit (or detachment) level maintenance operations.

a. Maintenance Department Proficiency. The AMTRP represents the collaborative effort of Marine aircraft maintenance SMEs who have considered NAMP training requirements, daily maintenance operations, and required QDLs to establish a set of standard metrics from which to measure an "average" community-specific maintenance department. These standards describe and define departmental capabilities and requirements necessary to develop and maintain like-unit proficiency in System Skills and QDLs.

b. Individual Proficiency. The AMTRP is designed to produce individual proficiency in maintenance training Tasks. These Tasks are based on specific requirements and performance standards to ensure aircraft maintenance personnel attain and maintain required knowledge and skills in MOS-specific aircraft systems.

1.2.2. Readiness:

a. Defense Readiness Reporting System (DRRS). Defense Readiness Reporting System (DRRS) is a Department of Defense (DoD) system of record for unit readiness reporting created to provide an objective, accurate, and timely assessment of unit capabilities. Reporting is based on unit capability to accomplish specific tasks, within an established Mission Essential Task List (METL) providing a common baseline for unit readiness reporting (see DoD Directive 7730.65). Each MET has one or more associated output standards which are used as reporting criteria in DRRS, at the unit level. These outputs are the key performance measures for readiness reporting. The maintenance T&R Program aligns with DoD and Joint Warfighting requirements by prescribing training standards required to produce Ready Basic Aircraft (RBA) and Ready Basic Mission Sets (RBM) for training and combat as depicted in Figure 1-01.

b. Marine Aviation Current Readiness Improvement Program. Core Competent Units require trained aircrew, ready aircraft and systems, and capable maintainers. The term, "ready for tasking" is used to describe the readiness measurement used by the USMC Current Readiness program.

(1) Ready for Tasking (RFT). RFT is not a specific aircraft configuration. RFT calculations result from combining Ready Basic Aircraft (RBA) and specific configurations of mission systems. RFT sets are defined as sets of equipment that are a combination of the ready airframe and mission systems. The following definitions apply:

(a) Ready Basic Aircraft (RBA). A Mission Capable Aircraft that is functional check flight (FCF) complete, capable of day or night

ENCLOSURE (200)

Instrument Meteorological Conditions (IMC) field operations, and has the necessary operational communication, Identification, Friend or Foe (IFF), navigation, flight and safety systems required by applicable NATOPS and FAA regulations.

(b) Ready Basic Mission Set(s) (RBM). Common mission systems that are required to support training or employment of a majority of core/mission skills in execution of all Mission Essential Tasks for each T/M/S.

(c) Ready MET Sets. Those systems, not already captured as RBA or RBM, that are required to support training or employment of a particular core/mission skill in execution of unit METs.

(2) Detailed information and guidance regarding this paragraph can be found in the Marine Aviation Current Readiness Improvement Program Guidebook.

c. Aviation Logistics Electronic Requirements Training System (ALERTS). The Deputy Commandant for Aviation (DC AVN) has developed procedures for measuring and reporting maintenance training readiness in terms of Qualifications, Certifications (Ordnance), Designations, MATMEP levels, and Licensing. System Skill Proficiency metrics shall replace MATMEP levels in this report. If a unit meets the standards set forth in the AMTRP, Maintenance Departments should be confident the unit possesses the knowledge and skills required for the unit to achieve its Ready Basic Aircraft/Ready for Tasking (RBA/RFT) goals required to achieve unit MET output standards. ALERTS will continue to be refined by each T/M/S and shall be incorporated into the approved maintenance training management system.

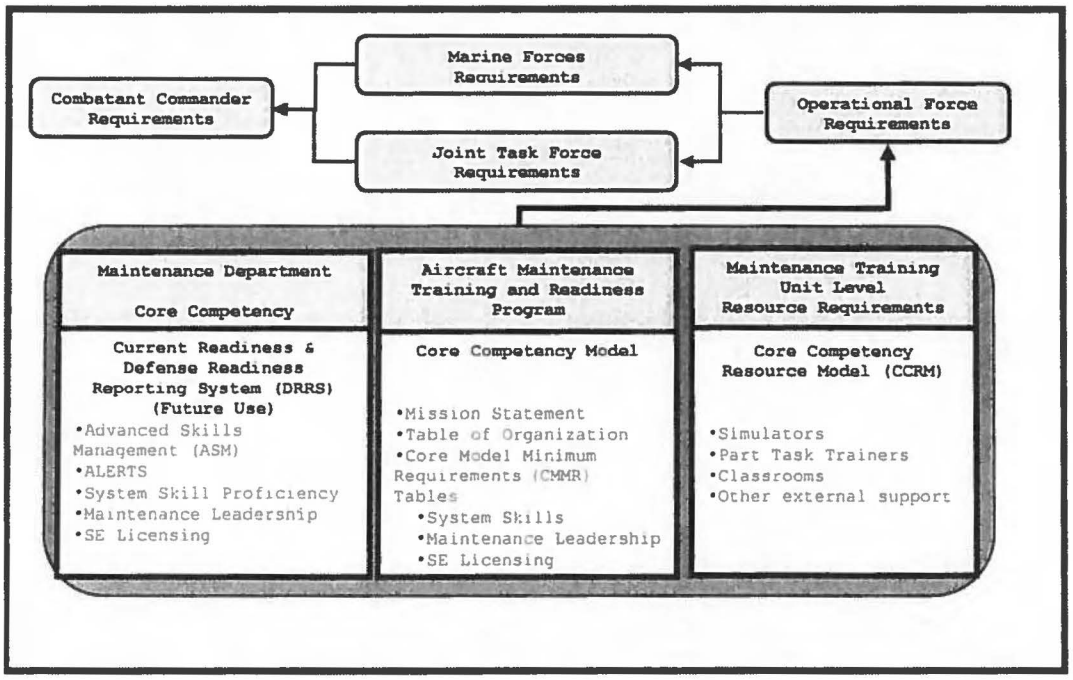


Figure 1-01.--Aircraft Maintenance T&R Program and Unit Readiness.

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE ( ) (30)

From: (b)(6) (b) (3) 10 USC § 130b
Sent: Tuesday, May 03, 2016 12:40 PM
To: (b)(6) (b) (3) 10 USC § 130b
Cc: (b)(6) (b) (3) 10 USC § 130b
Subject: RE: From (b)(6), (b)(3)
Attachments: HMH-463 RBA Data Report Jul 14 - Apr 16.xlsx
Signed By: (b)(6) (b) (3) 10 USC § 130b

MAJOR MCALD

Sir,

Attached is the RBA data report pulled from the AMSRR Website. This shows the assigned, out of reporting, in reporting, onboard, and RBA. It is organized by FY.

This report gives you the daily counts when the snapshot took place. The daily counts are averaged for each month.

I'm updating the line graph slides for you as well. I should have that done shortly.

Very Respectfully,

(b)(6) (b) (3) 10 USC § 130b

ENCLOSURE ( )
(201)

RBA Data

for dates from 10/1/2013 to 09/30/2014

MALS-24

Squadron	DATE	7/1/2014	7/2/2014	7/3/2014	7/4/2014	7/5/2014	7/6/2014	7/7/2014	7/8/2014	7/9/2014	7/10/2014	7/11/2014	7/12/2014	7/13/2014	7/14/2014	7/15/2014	7/16/2014
HMH-463																	
CH-53E	ASSN ACFT	8	8					8	8	8	6	6			6	6	6
	OOR ACFT	2	2					2	2	2	2	2			2	2	2
	IR ACFT	6	6					6	6	6	4	4			4	4	4
	OB ACFT	6	6					6	6	6	4	4			4	4	4
	RBA ACFT	2	3					4	4	4	2	1			1	1	1
HMH-463 DET A																	
CH-53E	ASSN ACFT	4	4					4	4	4	4	4			4	4	4
	OOR ACFT	0	1					0	0	0	0	0			0	0	0
	IR ACFT	4	3					4	4	4	4	4			4	4	4
	OB ACFT	4	4					4	4	4	4	4			4	4	4
	RBA ACFT	3	3					2	2	2	1	2			2	2	2

7/17/2014	7/18/2014	7/19/2014	7/20/2014	7/21/2014	7/22/2014	7/23/2014	7/24/2014	7/25/2014	7/26/2014	7/27/2014	7/28/2014	7/29/2014	7/30/2014	7/31/2014	TOTAL AVERAGE	8/1/2014	8/2/2014	8/3/2014	8/4/2014	8/5/2014	8/6/2014	8/7/2014	8/8/2014	8/9/2014
6	6			6	6	6	6	7			6	6	11	11	7.0	11			0	11	11	11	11	
2	2			2	2	2	2	2			2	2	2	2	2.0	2			0	2	2	2	2	
4	4			4	4	4	4	5			4	4	9	9	5.0	9			0	9	9	9	9	
4	4			4	4	4	4	5			4	4	9	9	5.0	9			0	9	9	9	9	
1	1			1	1	0	1	1			0	0	2	2	1.6	2			2	3	2	3	2	
4	4			4	4	4	4	4			4	4	4	4	4.0	4			0	4	4	4	4	
0	0			0	0	0	0	0			0	0	0	0	0.0	0			0	0	0	0	0	
4	4			4	4	4	4	4			4	4	4	4	4.0	4			0	4	4	4	4	
4	4			4	4	4	4	4			4	4	4	4	4.0	4			0	4	4	4	4	
3	3			3	2	2	3	3			3	3	3	3	2.5	3			4	4	4	4	4	

ASSN ACFT	11.0
OOR ACFT	2.0
IR ACFT	9.0
OB ACFT	9.0
RBA ACFT	4.0

	8/10/2014	8/11/2014	8/12/2014	8/13/2014	8/14/2014	8/15/2014	8/16/2014	8/17/2014	8/18/2014	8/19/2014	8/20/2014	8/21/2014	8/22/2014	8/23/2014	8/24/2014	8/25/2014	8/26/2014	8/27/2014	8/28/2014	8/29/2014	8/30/2014	8/31/2014	TOTAL AVERAGE	9/1/2014	9/2/2014
		11	11	11	11	11			11	11	11	11	11				11	11	11	11			10.5		
		2	2	2	2	2			2	2	2	3	3				3	3	3	3			2.2		
		9	9	9	9	9			9	9	9	8	8				8	8	8	8			8.3		
		9	9	9	9	9			9	9	9	9	8				8	8	8	8			8.3		
		2	2	2	2	2			3	3	3	3	3				3	4	4	4			2.7		
		4	4	4	4	4			4	4	4	4	4				4	4	4	4			3.8		
		0	0	0	0	0			0	0	0	0	0				0	0	0	0			0.0		
		4	4	4	4	4			4	4	4	4	4				4	4	4	4			3.8		
		4	4	4	4	4			4	4	4	4	4				4	4	4	4			3.8		
		4	3	3	3	3			3	2	3	3	4				4	4	0	0			3.1		

ASSN ACFT	14.3
OOR ACFT	2.2
IR ACFT	12.1
OB ACFT	12.1
RBA ACFT	5.8

9/3/2014	9/4/2014	9/5/2014	9/6/2014	9/7/2014	9/8/2014	9/9/2014	9/10/2014	9/11/2014	9/12/2014	9/13/2014	9/14/2014	9/15/2014	9/16/2014	9/17/2014	9/18/2014	9/19/2014	9/20/2014	9/21/2014	9/22/2014	9/23/2014	9/24/2014	9/25/2014	9/26/2014	9/27/2014
11	11	11			11	11	11	11	11			11	11	11	11	11			13	13	13	13	15	
3	3	4			4	4	2	2	3			2	2	2	2	2			4	4	4	2	4	
8	8	7			7	7	9	9	8			9	9	9	9	9			9	9	9	11	11	
8	8	8			8	8	9	9	8			8	9	9	9	9			11	11	11	11	13	
4	4	0			0	1	1	0	2			0	1	0	0	2			2	2	2	1	2	

4	4	4			4	4	4	4	4			4	4	4	4	4			2	2	2	2	0	
0	0	0			0	0	0	0	0			2	2	2	4	4			2	2	2	2	0	
4	4	4			4	4	4	4	4			2	2	2	0	0			0	0	0	0	0	
4	4	4			4	4	4	4	4			4	4	4	4	4			2	2	2	2	0	
0	0	0			0	0	0	0	0			0	0	0	0	0			0	0	0	0	0	

	9/28/2014	9/29/2014	9/30/2014	TOTAL AVERAGE
ASSN ACFT	15	15	15	15.0
OOR ACFT	5	3	3	4.2
IR ACFT	10	12	12	10.9
OB ACFT	13	13	13	12.7
RBA ACFT	2	1	1	1.4

	9/28/2014	9/29/2014	9/30/2014	TOTAL AVERAGE
ASSN ACFT	0	0	0	3.0
OOR ACFT	0	0	0	1.1
IR ACFT	0	0	0	1.9
OB ACFT	0	0	0	3.0
RBA ACFT	0	0	0	0.0

RBA Data

for dates from 10/1/2014 to 10/31/2014

MALS-24

Squadron	DATE	10/1/2014	10/2/2014	10/3/2014	10/4/2014	10/5/2014	10/6/2014	10/7/2014	10/8/2014	10/9/2014	10/10/2014	10/11/2014	10/12/2014	10/13/2014	10/14/2014	10/15/2014	10/16/2014	10/17/2014
HMH-463																		
CH-53E	ASSN ACFT	15	15	15			15	15	15	15					15	15	15	15
	OOR ACFT	3	3	3			3	3	3	3					3	3	3	3
	IR ACFT	12	12	12			12	12	12	12					12	12	12	12
	OB ACFT	13	13	13			13	13	13	13					13	13	13	13
	RBA ACFT	1	1	2			1	1	2	3					3	1	2	1
HMH-463 DET A																		
CH-53E	ASSN ACFT																	
	OOR ACFT																	
	IR ACFT																	
	OB ACFT																	
	RBA ACFT																	

10/18/2014	10/19/2014	10/20/2014	10/21/2014	10/22/2014	10/23/2014	10/24/2014	10/25/2014	10/26/2014	10/27/2014	10/28/2014	10/29/2014	10/30/2014	10/31/2014	TOTAL AVERAGE	11/1/2014	11/2/2014	11/3/2014	11/4/2014	11/5/2014	11/6/2014	11/7/2014	11/8/2014	11/9/2014	11/10/2014
		15	15	15	15	15			15	15	15	15	15	15.0			15	15	15	15	15			
		3	3	3	3	3			2	2	2	2	2	2.8			2	2	2	2	2			
		12	12	12	12	12			13	13	13	13	13	12.2			13	13	13	13	13			
		13	13	13	13	13			14	14	14	14	14	13.2			14	14	14	14	14			
		2	2	2	1	2			2	4	4	4	4	2.1			1	2	1	1	4			
														0.0										
														0.0										
														0.0										
														0.0										
														0.0										

ASSN ACFT	15.0
OOR ACFT	2.8
IR ACFT	12.2
OB ACFT	13.2
RBA ACFT	2.1

11/11/2014	11/12/2014	11/13/2014	11/14/2014	11/15/2014	11/16/2014	11/17/2014	11/18/2014	11/19/2014	11/20/2014	11/21/2014	11/22/2014	11/23/2014	11/24/2014	11/25/2014	11/26/2014	11/27/2014	11/28/2014	11/29/2014	11/30/2014	TOTAL AVERAGE	12/1/2014	12/2/2014	12/3/2014	12/4/2014
	15	15	15			15	15	15	15	15			15	15	15					15.0	15	15	15	15
	2	2	2			2	2	2	2	2			2	2	2					2.0	3	3	3	3
	13	13	13			13	13	13	13	13			13	13	13					13.0	12	12	12	12
	14	14	14			14	14	14	14	14			14	14	14					14.0	14	14	14	14
	4	4	4			4	2	1	4	7			7	7	7					3.8	5	6	5	7
																				0.0				
																				0.0				
																				0.0				
																				0.0				
																				0.0				

ASSN ACFT	15.0
OOR ACFT	2.0
IR ACFT	13.0
OB ACFT	14.0
RBA ACFT	3.8

| | | |

12/30/2014	12/31/2014	TOTAL AVERAGE	1/1/2015	1/2/2015	1/3/2015	1/4/2015	1/5/2015	1/6/2015	1/7/2015	1/8/2015	1/9/2015	1/10/2015	1/11/2015	1/12/2015	1/13/2015	1/14/2015	1/15/2015	1/16/2015	1/17/2015	1/18/2015	1/19/2015	1/20/2015	1/21/2015	1/22/2015
15	15	15.0					15	15	15	15	15			15	15	15	15	15					15	15
3	3	3.0					3	3	3	3	3			3	3	3	3	3					3	3
12	12	12.0					12	12	12	12	12			12	12	12	12	12					12	12
14	14	14.0					14	14	14	14	14			14	14	14	14	14					14	14
6	6	6.1					6	4	4	5	4			6	7	7	7	7					5	6
		0.0																						
		0.0																						
		0.0																						
		0.0																						
		0.0																						

I ACFT	15.0
ACFT	3.0
:FT	12.0
CFT	14.0
ACFT	6.1

1/23/2015	1/24/2015	1/25/2015	1/26/2015	1/27/2015	1/28/2015	1/29/2015	1/30/2015	1/31/2015	TOTAL AVERAGE	2/1/2015	2/2/2015	2/3/2015	2/4/2015	2/5/2015	2/6/2015	2/7/2015	2/8/2015	2/9/2015	2/10/2015	2/11/2015	2/12/2015	2/13/2015	2/14/2015	2/15/2015
15			15	15	15	15	15		15.0		15	15	15	15	15			15	15	15	15	15		
3			3	3	3	3	3		3.0		3	3	4	4	4			4	3	4	5	6		
12			12	12	12	12	12		12.0		12	12	11	11	11			11	12	11	10	9		
14			14	14	14	14	14		14.0		14	14	14	14	14			14	14	14	14	14		
7			6	5	7	6	6		5.8		6	7	5	6	3			3	2	3	4	6		
									0.0															
									0.0															
									0.0															
									0.0															
									0.0															

ASSN ACFT	15.0
OOR ACFT	3.0
IR ACFT	12.0
OB ACFT	14.0
RBA ACFT	5.8

2/16/2015	2/17/2015	2/18/2015	2/19/2015	2/20/2015	2/21/2015	2/22/2015	2/23/2015	2/24/2015	2/25/2015	2/26/2015	2/27/2015	2/28/2015	TOTAL AVERAGE	3/1/2015	3/2/2015	3/3/2015	3/4/2015	3/5/2015	3/6/2015	3/7/2015	3/8/2015	3/9/2015	3/10/2015	3/11/2015
	15	15	15	15			15	15	15	15	15		15.0		15	15	15	15	15			15	15	15
	6	6	6	6			6	6	6	6	6		4.9		8	8	8	8	8			8	8	8
	9	9	9	9			9	9	9	9	9		10.1		7	7	7	7	7			7	7	7
	14	14	14	14			14	14	14	14	14		14.0		14	14	14	14	14			14	14	14
	5	4	4	4			4	4	6	5	3		4.4		4	3	5	3	3			3	3	2
													0.0											
													0.0											
													0.0											
													0.0											
													0.0											

ASSN ACFT	15.0
OOR ACFT	4.9
IR ACFT	10.1
OB ACFT	14.0
RBA ACFT	4.4

3/12/2015	3/13/2015	3/14/2015	3/15/2015	3/16/2015	3/17/2015	3/18/2015	3/19/2015	3/20/2015	3/21/2015	3/22/2015	3/23/2015	3/24/2015	3/25/2015	3/26/2015	3/27/2015	3/28/2015	3/29/2015	3/30/2015	3/31/2015	TOTAL AVERAGE	4/1/2015	4/2/2015	4/3/2015	4/4/2015
15	15			15	15	15	15	15			15	15	15	15					15	15.0	15	15	15	
8	7			8	7	7	7	7			7	7	8	8					8	7.7	8	9	8	
7	8			7	8	8	8	8			8	8	7	7					7	7.4	7	6	7	
14	14			14	14	14	14	14			14	14	14	14					14	14.0	14	14	14	
0	0			0	0	0	0	0			0	0	0	0					0	1.3	0	0	0	
																				0.0	0	0	0	
																				0.0	0	0	0	
																				0.0	0	0	0	
																				0.0	0	0	0	
																				0.0	0	0	0	

ASSN ACFT	15.0
OOR ACFT	7.7
IR ACFT	7.4
OB ACFT	14.0
RBA ACFT	1.3

4/5/2015	4/6/2015	4/7/2015	4/8/2015	4/9/2015	4/10/2015	4/11/2015	4/12/2015	4/13/2015	4/14/2015	4/15/2015	4/16/2015	4/17/2015	4/18/2015	4/19/2015	4/20/2015	4/21/2015	4/22/2015	4/23/2015	4/24/2015	4/25/2015	4/26/2015	4/27/2015	4/28/2015	4/29/2015
	15	15	15	15	15			15	11	11	11	11			11	11	11	11	11			11	11	11
	8	8	8	8	8			8	4	4	4	4			3	3	3	3	3			3	4	4
	7	7	7	7	7			7	7	7	7	7			8	8	8	8	8			8	7	7
	14	14	14	14	14			14	10	10	10	10			10	10	10	10	10			10	10	10
	0	0	1	1	2			2	2	2	3	2			3	3	3	2	1			2	2	2
	0	0	0	0	0			0	4	4	4	4			4	4	4	4	4			4	4	4
	0	0	0	0	0			0	4	4	4	2			0	0	0	0	0			0	0	0
	0	0	0	0	0			0	0	0	0	2			4	4	4	4	4			4	4	4
	0	0	0	0	0			0	4	4	4	4			4	4	4	4	4			4	4	4
	0	0	0	0	0			0	0	0	0	0			0	0	0	0	0			0	0	0

ASSN ACF
OOR ACFT
IR ACFT
OB ACFT
RBA ACFT

4/30/2015	TOTAL AVERAGE	5/1/2015	5/2/2015	5/3/2015	5/4/2015	5/5/2015	5/6/2015	5/7/2015	5/8/2015	5/9/2015	5/10/2015	5/11/2015	5/12/2015	5/13/2015	5/14/2015	5/15/2015	5/16/2015	5/17/2015	5/18/2015	5/19/2015	5/20/2015	5/21/2015	5/22/2015	5/23/2015
11	12.6	11			11	11	11	11	11			11	11	11	11	11					11	11	11	
4	5.4	3			3	3	3	3	3			3	3	3	3	3					3	3	3	
7	7.2	8			8	8	8	8	8			8	8	8	8	8					8	8	8	
10	11.6	10			10	10	10	10	10			10	10	10	10	10					10	10	10	
1	1.5	1			1	2	2	2	1			3	3	3	4	3					3	4	2	
4	2.4	4			4	4	4	4	4			4	4	4	4	4					4	4	4	
0	0.6	0			0	0	0	0	0			0	0	0	0	0					0	0	0	
4	1.7	4			4	4	4	4	4			4	4	4	4	4					4	4	4	
4	2.4	4			4	4	4	4	4			4	4	4	4	4					4	4	4	
0	0.0	0			0	0	2	2	3			3	3	3	3	3					3	4	3	

r	15.0
	6.0
	9.0
	14.0
	1.5

5/24/2015	5/25/2015	5/26/2015	5/27/2015	5/28/2015	5/29/2015	5/30/2015	5/31/2015	TOTAL AVERAGE	6/1/2015	6/2/2015	6/3/2015	6/4/2015	6/5/2015	6/6/2015	6/7/2015	6/8/2015	6/9/2015	6/10/2015	6/11/2015	6/12/2015	6/13/2015	6/14/2015	6/15/2015	6/16/2015
			11	11	11			11.0	11	11	11	11	11			11	11	11	11	11			11	11
			3	3	3			3.0	3	3	3	3	4			5	5	5	4	4			4	4
			8	8	8			8.0	8	8	8	8	7			6	6	6	7	7			7	7
			10	10	10			10.0	10	10	10	10	10			10	10	10	10	10			10	10
			3	3	3			2.5	2	3	2	1	3			1	2	2	2	0			3	3
			4	4	4			4.0	4	4	4	4	4			4	4	4	4	4			4	4
			0	0	0			0.0	0	0	0	0	0			0	0	0	0	0			0	0
			4	4	4			4.0	4	4	4	4	4			4	4	4	4	4			4	4
			4	4	4			4.0	4	4	4	4	4			4	4	4	4	4			4	4
			3	3	3			2.4	2	2	2	3	3			2	2	2	2	2			2	2

ASSN ACFT	15.0
OOR ACFT	3.0
IR ACFT	12.0
OB ACFT	14.0
RBA ACFT	4.9

6/17/2015	6/18/2015	6/19/2015	6/20/2015	6/21/2015	6/22/2015	6/23/2015	6/24/2015	6/25/2015	6/26/2015	6/27/2015	6/28/2015	6/29/2015	6/30/2015	TOTAL AVERAGE	7/1/2015	7/2/2015	7/3/2015	7/4/2015	7/5/2015	7/6/2015	7/7/2015	7/8/2015	7/9/2015	7/10/2015
11	11	11			11	11	11	11	11			11	11	11.0	11	11					11	11	11	11
4	4	4			4	4	3	3	3			3	4	3.8	4	4					4	7	5	5
7	7	7			7	7	8	8	8			8	7	7.2	7	7					7	4	6	6
10	10	10			10	10	10	10	10			10	10	10.0	10	10					10	10	10	10
3	2	1			1	2	1	1	1			1	4	1.9	4	3					3	2	1	0
4	4	4			4	4	4	4	4			4	4	4.0	4	4					4	4	4	4
0	0	0			0	0	0	0	0			0	0	0.0	0	0					0	0	0	0
4	4	4			4	4	4	4	4			4	4	4.0	4	4					4	4	4	4
4	4	4			4	4	4	4	4			4	4	4.0	4	4					4	4	4	4
2	3	3			3	3	3	3	3			3	3	2.5	3	3					3	3	3	3

ASSN ACFT	15.0
OOR ACFT	3.8
IR ACFT	11.2
OB ACFT	14.0
RBA ACFT	4.4

7/11/2015	7/12/2015	7/13/2015	7/14/2015	7/15/2015	7/16/2015	7/17/2015	7/18/2015	7/19/2015	7/20/2015	7/21/2015	7/22/2015	7/23/2015	7/24/2015	7/25/2015	7/26/2015	7/27/2015	7/28/2015	7/29/2015	7/30/2015	7/31/2015	TOTAL AVERAGE	8/1/2015	8/2/2015	8/3/2015
		11	11	11	11	11			11	11	11	11	11			11	11	11	11	11	11.0			11
		5	5	5	5	5			4	4	4	4	4			4	4	4	4	4	4.5			4
		6	6	6	6	6			7	7	7	7	7			7	7	7	7	7	6.5			7
		10	10	10	10	10			10	10	10	10	10			10	10	10	10	10	10.0			10
		2	3	3	1	2			3	3	2	3	3			3	2	3	4	3	2.5			4
		4	4	4	4	4			4	4	4	4	4			4	4	4		4	4.0			4
		0	0	0	0	0			0	0	0	0	0			0	0	0		0	0.0			0
		4	4	4	4	4			4	4	4	4	4			4	4	4		4	4.0			4
		4	4	4	4	4			4	4	4	4	4			4	4	4		4	4.0			4
		1	1	3	3	2			1	1	2	2	2			2	2	2		1	2.2			1

ASSN ACFT	15.0
OOR ACFT	4.5
IR ACFT	10.5
OB ACFT	14.0
RBA ACFT	4.7

8/4/2015	8/5/2015	8/6/2015	8/7/2015	8/8/2015	8/9/2015	8/10/2015	8/11/2015	8/12/2015	8/13/2015	8/14/2015	8/15/2015	8/16/2015	8/17/2015	8/18/2015	8/19/2015	8/20/2015	8/21/2015	8/22/2015	8/23/2015	8/24/2015	8/25/2015	8/26/2015	8/27/2015	8/28/2015
11	11	11	11			11	11	11	11	11			11	11	11	11	11			11	11	11	11	11
4	3	3	2			3	4	5	4	4			4	4	4	4	4			4	4	4	4	4
7	8	8	9			8	7	6	7	7			7	7	7	7	7			7	7	7	7	7
10	10	10	10			10	10	10	10	10			10	10	10	10	10			10	10	10	10	10
4	4	3	3			4	4	3	3	0			2	2	0	2	2			2	2	2	1	1

4	4	4	4			4	4	4	4	4			4	4	4	4	4			4	4	4	4	4
0	0	0	0			0	0	0	0	0			0	0	0	0	0			0	0	0	0	0
4	4	4	4			4	4	4	4	4			4	4	4	4	4			4	4	4	4	4
4	4	4	4			4	4	4	4	4			4	4	4	4	4			4	4	4	4	4
1	1	1	1			2	2	2	2	2			2	2	2	2	2			2	2	2	1	2

8/29/2015	8/30/2015	8/31/2015	TOTAL AVERAGE	9/1/2015	9/2/2015	9/3/2015	9/4/2015	9/5/2015	9/6/2015	9/7/2015	9/8/2015	9/9/2015	9/10/2015	9/11/2015	9/12/2015	9/13/2015	9/14/2015	9/15/2015	9/16/2015	9/17/2015	9/18/2015	9/19/2015	9/20/2015	9/21/2015
		11	11.0	11	11		11				11	11	11	11			11	11	11	11	11			11
		4	3.8	4	4		4				4	4	4	5			5	6	7	7	7			6
		7	7.2	7	7		7				7	7	7	6			6	5	4	4	4			5
		10	10.0	10	10		10				10	10	10	10			10	10	10	10	10			10
		2	2.4	2	2		1				1	2	1	1			1	1	1	1	1			1
		4	4.0	4	4		4				4	4	4	4			4	4	4	4	4			4
		0	0.0	0	0		0				0	0	0	0			0	0	0	0	0			0
		4	4.0	4	4		4				4	4	4	4			4	4	4	4	4			4
		4	4.0	4	4		4				4	4	4	4			4	4	4	4	4			4
		1	1.7	2	3		3				3	3	3	3			2	2	2	1	0			0

ASSN ACFT	15.0
OOR ACFT	3.8
IR ACFT	11.2
OB ACFT	14.0
RBA ACFT	4.0

9/22/2015	9/23/2015	9/24/2015	9/25/2015	9/26/2015	9/27/2015	9/28/2015	9/29/2015	9/30/2015	TOTAL AVERAGE
11	11	11	11			11	11	11	11.0
6	6	6	3			3	4	5	5.0
5	5	5	8			8	7	6	6.0
10	10	10	10			10	10	10	10.0
1	1	0	0			0	0	0	0.9
4	4	4	4			4	4	4	4.0
4	4	4	4			4	4	4	1.4
0	0	0	0			0	0	0	2.6
4	4	4	4			4	4	4	4.0
0	0	0	0			0	0	0	1.4

ASSN ACFT	15.0
OOR ACFT	6.4
IR ACFT	8.6
OB ACFT	14.0
RBA ACFT	2.3

RBA Data

for dates from 10/1/2014 to 10/31/2014

MALS-24

Squadron	DATE	10/1/2015	10/2/2015	10/3/2015	10/4/2015	10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/9/2015	10/10/2015	10/11/2015	10/12/2015	10/13/2015	10/14/2015	10/15/2015	10/16/2015	10/17/2015
HMH-463																		
CH-53E	ASSN ACFT	11	11			11	11	15	15	15				15	15	15	15	
	OOR ACFT	5	5			5	4	7	6	6				6	5	5	5	
	IR ACFT	6	6			6	7	8	9	9				9	10	10	10	
	OB ACFT	10	10			10	10	13	13	13				13	14	14	14	
	RBA ACFT	1	1			1	0	0	0	0				0	1	1	2	
HMH-463 DET A																		
CH-53E	ASSN ACFT	4	4			4	4	0	0	0				0	0	0	0	
	OOR ACFT	4	4			4	4	0	0	0				0	0	0	0	
	IR ACFT	0	0			0	0	0	0	0				0	0	0	0	
	OB ACFT	4	3			3	3	0	0	0				0	0	0	0	
	RBA ACFT	0	0			0	0	0	0	0				0	0	0	0	

10/18/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	10/23/2015	10/24/2015	10/25/2015	10/26/2015	10/27/2015	10/28/2015	10/29/2015	10/30/2015	10/31/2015	TOTAL AVERAGE	11/1/2015	11/2/2015	11/3/2015	11/4/2015	11/5/2015	11/6/2015	11/7/2015	11/8/2015	11/9/2015	11/10/2015
	15	15	15	15	15			15	15	15	15	15		14.2		15	15	15	15	15			15	15
	5	5	4	4	3			3	5	5	5	4		4.9		4	4	4	4	4			4	4
	10	10	11	11	12			12	10	10	10	11		9.4		11	11	11	11	11			11	11
	14	14	14	14	14			14	14	14	14	14		13.0		10	14	14	14	14			14	14
	2	2	3	3	3			3	3	2	4	4		1.7		4	2	2	1	3			2	2
	0	0	0	0	0			0	0	0	0	0		0.8										
	0	0	0	0	0			0	0	0	0	0		0.8										
	0	0	0	0	0			0	0	0	0	0		0.0										
	0	0	0	0	0			0	0	0	0	0		0.6										
	0	0	0	0	0			0	0	0	0	0		0.0										

ASSN ACFT	15.0
OOR ACFT	5.6
IR ACFT	9.4
OB ACFT	13.7
RBA ACFT	1.7

11/11/2015	11/12/2015	11/13/2015	11/14/2015	11/15/2015	11/16/2015	11/17/2015	11/18/2015	11/19/2015	11/20/2015	11/21/2015	11/22/2015	11/23/2015	11/24/2015	11/25/2015	11/26/2015	11/27/2015	11/28/2015	11/29/2015	11/30/2015	TOTAL AVERAGE	12/1/2015	12/2/2015	12/3/2015	12/4/2015
		15			15	15	15	15	15			15	15	15					15	15.0	15	15	15	15
		4			4	4	4	4	5			5	5	4					4	4.2	4	4	4	4
		11			11	11	11	11	10			10	10	11					11	10.8	11	11	11	11
		14			14	14	14	14	14			14	14	14					14	13.8	14	14	14	14
		2			1	1	2	2	2			2	3	3					6	2.4	5	5	4	3
																				0.0				
																				0.0				
																				0.0				
																				0.0				
																				0.0				

ASSN ACFT	15.0
OOR ACFT	4.2
IR ACFT	10.8
OB ACFT	13.8
RBA ACFT	2.4

| | | |

12/30/2015	12/31/2015	TOTAL AVERAGE	1/1/2016	1/2/2016	1/3/2016	1/4/2016	1/5/2016	1/6/2016	1/7/2016	1/8/2016	1/9/2016	1/10/2016	1/11/2016	1/12/2016	1/13/2016	1/14/2016	1/15/2016	1/16/2016	1/17/2016	1/18/2016	1/19/2016	1/20/2016	1/21/2016	1/22/2016
15		15.0				15	15	15	15	15			15	15	15	15	15					15	15	15
5		4.7				5	6	7	7	7			7	7	7	7	7					9	9	8
10		10.3				10	9	8	8	8			8	8	8	8	8					6	6	7
14		14.0				14	14	14	14	14			14	14	14	14	13					13	13	13
0		1.7				0	0	0	0	2			2	1	1	3	5					3	3	3
		0.0																						
		0.0																						
		0.0																						
		0.0																						
		0.0																						

I ACFT	15.0
ACFT	4.7
FT	10.3
CFT	14.0
ACFT	1.7

1/23/2016	1/24/2016	1/25/2016	1/26/2016	1/27/2016	1/28/2016	1/29/2016	1/30/2016	1/31/2016	TOTAL AVERAGE	2/1/2016	2/2/2016	2/3/2016	2/4/2016	2/5/2016	2/6/2016	2/7/2016	2/8/2016	2/9/2016	2/10/2016	2/11/2016	2/12/2016	2/13/2016	2/14/2016	2/15/2016
		15	15	15	13	13			14.8	13	13	13	13	13				13	13	13	13			13
		8	8	8	6	6			7.2	7	7	7	7	7				7	7	6	6			4
		7	7	7	7	7			7.6	6	6	6	6	6				6	6	7	7			9
		13	13	13	11	11			13.3	11	11	11	11	11				11	11	11	11			11
		2	2	2	2	2			1.8	2	3	2	4	5				4	3	4	4			5
									0.0															
									0.0															
									0.0															
									0.0															
									0.0															

ASSN ACFT	14.8
OOR ACFT	7.2
IR ACFT	7.6
OB ACFT	13.3
RBA ACFT	1.8

2/16/2016	2/17/2016	2/18/2016	2/19/2016	2/20/2016	2/21/2016	2/22/2016	2/23/2016	2/24/2016	2/25/2016	2/26/2016	2/27/2016	2/28/2016	2/29/2016	TOTAL AVERAGE	3/1/2016	3/2/2016	3/3/2016	3/4/2016	3/5/2016	3/6/2016	3/7/2016	3/8/2016	3/9/2016	3/10/2016
13	13	13	13			13	13	13	13	13	13	13	13	13.0	13	13	13	13			13	13	13	13
6	6	5	5			5	5	5	5	5	5	5	4	5.7	4	4	4	4			4	3	3	3
7	7	8	8			8	8	8	8	8	8	8	9	7.3	9	9	9	9			9	10	10	10
11	11	11	11			11	11	11	11	11	11	11	11	11.0	11	11	11	11			11	11	11	11
3	4	4	5			4	3	4	5	2	2	4	5	3.7	3	3	4	1			1	3	3	5
														0.0										
														0.0										
														0.0										
														0.0										
														0.0										

ASSN ACFT	13.0
OOR ACFT	5.7
IR ACFT	7.3
OB ACFT	11.0
RBA ACFT	3.7

3/11/2016	3/12/2016	3/13/2016	3/14/2016	3/15/2016	3/16/2016	3/17/2016	3/18/2016	3/19/2016	3/20/2016	3/21/2016	3/22/2016	3/23/2016	3/24/2016	3/25/2016	3/26/2016	3/27/2016	3/28/2016	3/29/2016	3/30/2016	3/31/2016	TOTAL AVERAGE
13			13	13	13	13	13				13	13	13	13			13	13	13	13	13.0
3			3	3	3	3	5				5	5	3	2			2	2	2	2	3.3
10			10	10	10	10	8				8	8	10	11			11	11	11	11	9.7
11			11	11	11	11	11				11	11	11	11			11	11	11	11	11.0
6			6	6	3	5	5				4	3	4	4			3	4	4	4	3.8
																					0.0
																					0.0
																					0.0
																					0.0
																					0.0

ASSN ACFT	13.0
OOR ACFT	3.3
IR ACFT	9.7
OB ACFT	11.0
RBA ACFT	3.8

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
3000 MARINE CORPS PENTAGON
WASHINGTON, DC 20350-3000

MCO 3125.1B
APP
27 Apr 2009

MARINE CORPS ORDER 3125.1B

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS FLYING HOUR PROGRAM (FHP) MANAGEMENT

Ref: (a) NAVSO P-3013
(b) MCO 1553.1B
(c) MCO P3500.14H
(d) 2007 Marine Aviation Plan (AVPLAN)
(e) OPNAVINST 3710.7T
(f) CNRF 7100.1B
(g) MCO P7300.19B
(h) SECNAV M-5210.1
(i) MCO P4400.177D
(j) Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms," April 12, 2001
(k) OPNAVINST 5442.4M
(l) CNO Washington DC 071535ZDEC2005 (NOTAL)
(m) SECNAV M-5214.1
(n) OPNAVINST 7310.1F
(o) NAVMC DIR 3500.14

Encl: (1) Procedural Guidance for Marine Corps Flying Hour Program

Reports Required: I. Sortie Based Training Submissions (Report Control Symbol EXEMPT), encl (4), par. 2a
II. Budget OPTAR Submission (Report Control Symbol EXEMPT), encl (5), par. 5
III. Flight Hour Cost Report (Report Control Symbol EXEMPT), encl (6), par. 5a
IV. Reserve Component Activation Funding (Report Control Symbol EXEMPT), encl (6), par. 12c(1)

1. Situation. This Order provides policy, guidance, and responsibilities for the execution of the Marine Corps Flight Hour Program (FHP) per references (a) through (o).

2. Cancellation. MCO 3125.1A.

3. Mission. Plan, execute, and manage an annual Marine Corps FHP for Active Component (AC) and Reserve Component (RC) deployable and non-deployable squadrons that provides combat capable units and operational support to Marine Air Ground Task Force (MAGTF) and joint force commanders.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

ENCLOSURE ( )
(202)

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. A primary responsibility of Marine commanders is combat readiness. Marine Corps flight operations management is composed of two elements: the Sortie Based Training Program (SBTP) and the FHP. The SBTP is the commander's execution tool and the FHP is the budgeting tool. Commanders shall utilize all available resources to ensure their commands are trained per the current editions of the appropriate Type/Model/Series (T/M/S) Training and Readiness (T&R) manuals and the FHP is managed per this Order.

(2) Concept of Operations. The FHP provides resources for Marine aviation to train in prescribed readiness areas, perform flights in support of required maintenance and logistics efforts, and conduct routine peacetime and deployed operations. It is imperative that the Marine Aviation T&R, Core Competency Resource Model (CCRM), SBTP, Marine Corps FHP and FHP reporting are completely integrated to validate the annual Marine Corps aviation readiness and flying hour requirements.

(a) Marine Corps FHP. The term "Flying Hour Program" refers to the allocation and obligation of funds from the Operation and Maintenance, Navy (O&M,N) and Operation and Maintenance, Navy Reserve (O&M,NR) accounts appropriated to the Marine Corps for the operation and maintenance of Marine Corps aircraft. The Deputy Commandant for Aviation (DC AVN) (APP-2) validates Marine Forces peacetime tactical aviation training requirements with the T&R, CCRM and SBTP submissions and submits them to Chief of Naval Operations (CNO) headquarters staff (OPNAV) Flying Hour Program (Code N432D). OPNAV N432D incorporates Marine requirements with the Navy's Fleet Response Plan (FRP) sortie based flying hour requirements into one OP-20 FHP budget exhibit. OPNAV N43 conducts program reviews and submits a balanced fleet (Navy/Marine Corps) aviation readiness requirement to OPNAV N80 Programming Division, for final submission to the Secretary of the Navy (SECNAV) Financial Management Branch (FMB). FMB submits the budget proposal to Congress. Once approved by Congress and signed by the President, the proposal becomes a Presidential Budget. Just prior to the fiscal year, the Navy's Total Obligated Authority is returned to FMB for distribution to the Navy's Budget Submitting Offices. The FHP has four Type Commanders (TYCOMs): Commander, Naval Air Forces Pacific (COMNAVAIRPAC); Commander, Naval Air Forces Atlantic (COMNAVAIRLANT); Commander, Naval Reserve Forces (COMNAVRESFOR); and Commander, Naval Air Forces Europe (COMNAVEUR). The FHP funds are passed to the respective TYCOM through Commander U.S. Fleet Forces (USFF); and Commander, Pacific Fleet (COMPACFLT) first, and then allocated to Marine Forces Pacific (MARFORPAC), Marine Forces Command (MARFORCOM), and Marine Forces Reserve (MARFORRES) (MARFORs) in the form of an Operating Target (OPTAR). COMNAVRESFOR passes Marine Reserve OPTAR to the Naval site comptrollers under the management of the 4th Marine Aircraft Wing (MAW) Aviation Logistics Division Comptroller (ALD-C). The programming and obligation of O&M,N and O&M,NR funds through the Naval chain of command is a formalized administrative procedure outlined in reference (a). The Marine Corps FHP is funded in four categories or schedules: tactical aircraft (TACAIR), Fleet Air Training (FAT), Fleet Air Support (FAS), and Reserves.

1. TACAIR FHP. The TACAIR FHP encompasses all deployable AC Fixed-Wing, Rotary-Wing and Tilt-Rotor squadrons. Activated RC squadrons will be funded from the gaining MARFOR TACAIR FHP. Activated MARFORRES squadrons' O&M,NR FHP funds unexecuted because of a squadron's mobilization will be returned to Commander Naval Reserve Forces Command (CNRFC) and FMB

for reprogramming to the gaining MARFOR. Marine Aviation utilizes the CCRM integrated with the SBTP as the primary inputs for the TACAIR FHP requirement. Marine Corps tactical aviation shall maintain T-2.0 average level training readiness to be prepared to rapidly and effectively deploy on short notice for OPLAN or contingency operations. Funding for the TACAIR FHP is displayed in the OP-20 Schedule A in chapter 1.

2. FAT FHP. The FAT FHP encompasses the Marine Corps Fleet Replacement Squadrons (FRS). This schedule is based upon annual FRS aircrew throughput requirements, published as the Marine Corps Pilot Training Rate in the annual aircrew Training & Education Command (TECOM) Fiscal Year Training Implementation Plan (TIP), which is provided to OPNAV N782B as outlined in reference (b). OPNAV N782B publishes a requirements letter, which is provided to OPNAV N43 for programming in the OP-20. Funding for the FAT FHP is displayed in the OP-20 schedule B at chapter 1.

3. FAS FHP. The FAS FHP encompasses deployable and non-deployable AC Operational Support Airlift (OSA), Search and Rescue, and Marine Helicopter Squadron 1 (HMX-1) aircraft. FAS hours are calculated using historical operational, support, and aircrew training requirements. Funding for the FAS FHP is displayed in the OP-20 Schedule C in chapter 1.

4. Reserves FHP. The Reserves FHP encompasses all deployable and non-deployable RC Fixed-Wing, Rotary-Wing and Tilt-Rotor squadrons and OSA aircraft. Reserve hours are calculated using the minimum aircrew readiness requirements and operational commitments. Funding for the Reserve FHP is displayed in the OP-20 schedule D in Chapter 1 under the total Chief Naval Reserves (CNR) requirement.

(b) T&R Program. The Marine Aviation T&R Program, reference (c), guides the development of unit warfighting capabilities by providing commanders with standardized programs of instruction for training all aviation aircrew through community T&R syllabi. These syllabi are based on specific performance standards designed to ensure units maintain proficiency in core skills and combat leadership. Aviation T&R models are used to standardize T&R Program methodology and to provide a direct link between aviation training, readiness, requirements, and resources. The two models used are the Core Competency Model and the CCRM.

1. Core Competency Model. Also known as the Core Model, the Core Competency Model establishes the basic structure around which each T&R Program is created. It links community Mission Statements, Mission Essential Tasks Lists, core capability statements, core capability and combat leadership requirements. All community T&R Manuals follow the core competency model structure but the requirements and metrics are tailored to the specific needs of the community.

2. CCRM. The Marine Corps CCRM directly links the T&R Program with the USMC FHP and Status of Resources and Training System readiness reporting programs. The CCRM generates annual sortie and flying hour requirements (broken down by training, support, and operational hour category) for maintaining selected T-Level readiness ratings for each tactical aviation squadron. Each community's CCRM reflects the core model as defined in its respective T&R manual. See chapter 2 for detailed CCRM information.

(c) SBTP. The Marine Corps SBTP concept was first introduced in the Marine Aviation Campaign Plan (MACP) and is continued in the Marine Aviation Plan (AVPLAN), reference (d). The intent of the SBTP is to allow

squadron commanders to develop an executable sortie based training plan that reflects their unit's training exercise and employment plan and T&R requirements to provide combat ready units for the MAGTF. The SBTP focus is on training to the core competencies of each T/M/S aircraft and emphasizes the units' core competencies over individual training goals while wisely managing aircraft utilization. The standardized format for forecasting and reporting unit FHPs surpasses previous SBTP models. The standardized Marine Corps-wide definition of a sortie, in accordance with reference (e), is detailed in chapter 3, to include the aforementioned SBTP reporting formats and procedures.

b. Subordinate Element Missions. FHP management requires the assignment of the following responsibilities.

(1) Deputy Commandant for Aviation (DC AVN). DC AVN is the HQMC Aviation Combat Element FHP advocate and is responsible for overall management of the Marine Corps FHP, to include the following.

(a) Advocate Marine Corps FHP requirements within the Department of the Navy's (DON) planning, programming, budgeting, and execution process and maintain oversight of Marine Forces FHP execution and reporting.

(b) Review MARFORCOM, MARFORPAC, and MARFORRES TACAIR, FAT, FAS, and Reserve submissions ensuring they meet Marine Corps requirements. Submit the AC and RC FHP to OPNAV N-43 per chapter 2.

(c) Provide MARFORs with a monthly FHP execution update, displaying hours, from both Naval Aviation Logistics Command/Management Information System (NALCOMIS) and OP-20 databases, broken down into training, support, operational, and contingency categories, as well as the cost per flight hour and hour per crew per month (H/C/M).

(d) Inform the Deputy Commandant for Programs and Resources of shortfalls in funding which could adversely affect the Marine Corps FHP.

(e) Evaluate waivers for pilots unable to meet annual flying hour minimums.

(f) Act on all requests for waiver of Duty Involving Flight Denied (DIFDEN) status in cases where it is advantageous for MAGTF staff aviators to fly in support of operational flying units.

(g) Oversee the reprogramming of unexecuted activated 4th MAW unit FHP funds to the gaining AC MARFORs and act as Marine Corps advocate to FMB and the Office of the Secretary of Defense (OSD) during this process.

(2) Deputy Commandant for Manpower & Reserve Affairs (DC M&RA)

(a) Staff tactical aircraft squadrons at a manning level of 90 percent of Table of Organization in accordance with the MACP and funding assumptions within the OP-20. This policy will accomplish the following.

(1) Ensure funded TACAIR billets are filled to the maximum extent possible.

(2) Provide consistency between reported manpower data, quarterly Operational Tempo reports, and authorized manning. The DON FMB tracks unit manning, and corresponding fiscal restrictions are made in the FHP to compensate for manning at less than authorized levels. Manning

squadrons at authorized levels will ensure that no unnecessary decrements are taken within the FHP budget.

(b) Ensure all aviators assigned to MAGTF Headquarters and joint staffs are assigned in a DIFDEN status.

(3) Deputy Commandant for Programs and Resources (DC P&R). Serve as alternate point of contact for Marine Corps FHP on technical budget/fiscal matters. Assist DC AVN in adjudicating unresolved aviation budgetary issues.

(4) Commanding General (CG), TECOM

(a) Provide Marine Corps FRS requirements, in Replacement Aircrew equivalents for flight students per the Future Year Defense Plan TIP and total flying hour/sortie requirements, by T/M/S aircraft, to OPNAV N789 for use in the development of the FAT FHP.

(b) Maintain the CCRM ensuring its consistency with the current community T&Rs per chapter 2.

(5) COMMARFORPAC, COMMARFORCOM. Function as the FHP resource sponsor, oversight authority, and TYCOM level representative.

(a) Review proposed MAW SBTP and authorize flight hour funding to support the approved MARFOR FHP.

(b) Effect liaison with Commander, Naval Air Forces and maintain responsibility for presenting, monitoring, and defending all budgetary actions to TYCOM/OPNAV/Headquarters Marine Corps (HQMC).

(c) Submit required Marine Corps Sierra-Hotel Aviation Readiness Program (M-SHARP) SBTP reports to HQMC (APP-2) per chapter 3.

(d) Facilitate assignment of OPTAR grants to subordinate units and monitor and supervise execution of those grants.

(e) Assist subordinate units in developing program requirements and determine actions to be taken when funds are inadequate to execute approved FHP.

(f) Approve all contracts involving manpower and contract maintenance in accordance with chapter 6.

(g) Upon assuming operational control (OPCON) of activated RC squadrons, request supplemental OP-20 O&M,N funds to support funding the FHP of those squadrons.

(h) Allocate funding for and report all activated RC squadron flight hours per enclosures (6) and (7).

(6) COMMARFORRES. Function as the Reserve FHP resource sponsor, oversight authority, and TYCOM level representative to CNR.

(a) Review Reserve FHP requirements and submit to HQMC (APP-2) prior to submission to CNRFC.

(b) Submit required M-SHARP SBTP reports to HQMC (APP-2) per chapter 3.

(c) Ensure activated RC squadrons assigned OPCON to MARFORCOM or MARFORPAC track and account for flight hours per chapter 5.

(d) Facilitate assignment of OPTAR grants to subordinate units and monitor execution of those grants.

(e) Assist subordinate units in developing program requirements and determine actions to be taken when funds are inadequate to execute approved program.

(f) Report all activated units' unexecuted flight hour funds to CNRFC and FMB for reprogramming per chapter 5.

(g) Approve all contracts involving manpower and contract maintenance per chapter 6.

(7) CG, 1st/2d/3d MAW

(a) Provide oversight on subordinate units' SBTPs and TACAIR FHPs to ensure they provide the sorties per aircrew required to attain the Core Skill Proficient (CSP) and combat leadership aircrew necessary to achieve a T-2.0 average level of readiness.

(b) Ensure participation in the TACAIR FHP is limited to the TACAIR squadron and augment pilots necessary to meet readiness goals and operational commitments. Ensure all TACAIR staff aircrew maintain readiness minimums prescribed in reference (e).

(c) Assign all first tour aviators to TACAIR squadrons for at least 2 years prior to reassignment within the MAW.

(d) Provide HQMC (APP-2) annual unit SBTP projections and monthly execution data per chapter 3.

(e) Perform accounting and reporting for OPTAR assigned by the TYCOM/MARFOR using the procedures per chapter 4.

(f) Endorse requests for waivers of the minimum flying requirements for those aviators not able to make annual flying minimums.

(g) Monitor the FAT FHP requirement and execution for assigned FRSs.

(h) Provide a quarterly status of funds report by fund code, authorization, obligation, and balance to the MARFORs.

(8) CG, 4th MAW

(a) Manage reporting for OPTAR assigned by CNRFC N-8 using the procedures per reference (f) and chapter 5.

(b) Ensure all site comptrollers/squadrons report data to CNRFC N-8 per reference (f).

(c) Ensure Monthly Flight Hour Cost Report (FHCR) numbers match between all site comptrollers, G-3 and NALCOMIS. Submit required reports to HQMC (APP-2) per chapter 5.

(d) Ensure all contracts involving manpower/contract maintenance receives CNRFC N-8 approval per reference (f).

(e) Report unexecuted flight hours for all activated units to CNRFC N-8 for reprogramming and ensure all activated units attached to a MARFOR track and account for flight hours per chapter 4.

(f) Assist subordinate units in developing program requirements and determine actions to be taken when funds are inadequate to execute approved program.

(g) Review Reserve FHP requirements to maintain unit readiness to meet required training and support requirements.

(h) Provide HQMC (APP-2) annual unit SBTP projections and monthly execution data per chapter 3.

(i) Ensure activated squadrons attached to MARFORCOM or MARFORPAC track and account for flight hours per chapter 4.

(9) Commander, Marine Corps Installations East (MCI-East); Commander, Marine Corps Installations West (MCI-West), and Commander, Marine Corps Bases Japan

(a) Provide annual FAS flying hour requirements to the Commander, MARFORCOM/MARFORPAC.

(b) Receive funding from MARFOR and distribute to air station commands as required.

(c) Provide financial management reports to the MARFOR.

(d) Provide HQMC (APP-2) annual unit SBTP projections and monthly execution data per chapter 3.

(e) Provide a weekly status of funds report by fund code, authorization, obligation, and balance to the MARFOR.

(10) Commanding Officer (CO), Marine Aircraft Group (MAG)

(a) Monitor unit STBPs and TACAIR FHP planning and execution. Monitor FAT, FHP planning and execution, if applicable.

(b) Ensure all FHP funds are expended in accordance with reference (g) and chapter 4.

(c) Ensure squadron Budget OPTAR Report (BOR) inputs and NALCOMIS flight hour totals match on a monthly basis. Report initial disparities between the BOR and NALCOMIS flight hours to MAW G-3/Comptroller/Aviation Logistics Department.

(d) Provide accurate SBTP projection and execution data per chapter 3.

(11) CO, Marine Aviation Logistics Squadron (MALS)

(a) Ensure all Operational Functional Category (OFC) funds received from the MAG fiscal officer are administered properly by the MALS

Aviation Supply Officer (AvnSupO) in accordance with applicable directives and chapter 4.

(b) Ensure the AvnSupO has established positive controls to avoid the over-obligation or over-expenditure of funds.

(c) Ensure all contracts involving manpower/contract maintenance receives MARFOR approval per chapter 6.

(d) Ensure squadron BOR and NALCOMIS flight hour totals match on a monthly basis and ensure any discrepancies are corrected prior to totals going forward to the MAW G-3 and TYCOM.

(12) CO, Squadron

(a) Plan and execute unit SBTP to maintain the requisite number of CSP and combat leadership aircrews for T-2.0 readiness levels per unit T&R Core Competency Model.

(b) Ensure aircrew log flight hours per chapter 4.

(c) Ensure the Operations Chief and Maintenance Analyst reconcile unit flight hour totals daily, ensuring that the BOR and NALCOMIS data match exactly. Any discrepancies are to be corrected prior to the totals going forward to the MALS Analyst and MAG fiscal department.

(d) Provide accurate SBTP projection and execution data per chapter 3.

(13) CO, Reserve Site

(a) Ensure all FHP funds are entered and obligated in Fund Administration and Standardized Data Automation (FASTDATA) before releasing into supply system in accordance with chapter 5.

(b) Ensure squadron Flight Hour Cost Report (FHCR) and NALCOMIS flight hour totals match on a monthly basis and provide an accurate submission of monthly flight hours to the site comptroller.

(c) Provide annual SBTP projection and monthly execution data per chapter 3.

5. Administration and Logistics. Standardization of Marine Corps flying hour reporting is essential to accurately track FHP execution, which is used for future FHP planning and programming decisions. The goal of standardized reporting is to accurately track execution of hours by training, support, operational, and contingency category. Additional report requirements may be requested via Naval message for tracking of FHP budget and execution (i.e. additional information to justify CPH variance).

a. Records Disposition. All FHP reports maintained by HQMC (APP-2) and MARFOR staff agencies shall be maintained for 10 years per reference (h) SSIC 3125.1.

b. Change Recommendations. Submit all recommendations concerning this Order to HQMC (APP-2) via the appropriate chain of command.

6. Commands and Signal

a. Command. This Order is applicable to the Total Force Marine Corps.

b. Signal. This Order is effective the date signed.

JAMES F. AMOS
Assistant Commandant
of the Marine Corps

DISTRIBUTION: PCN 10203181000

Copy to: 7000260 (2)
7000144/8145001 (1)

TABLE OF CONTENTS

IDENTIFICATION	TITLE	PAGE
Chapter 1	FHP OP-20 Display and Methodology Schedules	1-1
Figure 1-1	Department of the Navy OP-20 Display Analysis Of Navy Flying Budget Backup Exhibit	1-7
Chapter 2	Core Competency Resource Model Guidelines	2-1
Figure 2-1	CCRM User Interface Page	2-3
Chapter 3	Marine Corps Sortie Based Training Program (SBTP)	3-1
Chapter 4	Active Component FHP Fiscal Comptroller Procedures	4-1
Chapter 5	Reserve Component FHP Fiscal Comptroller Procedures	5-1
Chapter 6	Contracts and Contract Maintenance Procedures	6-1
Chapter 7	Glossary	7-1
Appendix A	MARFORCOM/MARFORPAC Flying Hour Program Administrative Chain of Command and Flow of Funds	A-1
Appendix B	MARFORRES Flying Hour Program Administrative Chain of Command and Flow of Funds	B-1

Chapter 1

FHP OP-20 Display and Methodology Schedules

1. General. The FHP OP-20 display and main methodology categories are for: Tactical Aircraft; Fleet Air Training (FAT) OP-20 Methodology; Fleet Air Support (FAS) OP-20 Methodology, and Reserve Defined Methodology. The OP-20, see figure 2.1, is a Department of the Navy (DON) planning document published by OPNAV N43 for the FHP several times per year to establish the annual flying hours by Type/Model/Series (T/M/S), which is used for FHP funding and fleet planning. Requirements are computed by using the CCRM and revised with MARFOR input.

a. Display. The OP-20 display and methodology schedules (not including Tactical Aircraft) are determined by the following standard criteria: FY; Schedule; COM/PAC/; T/M/S; Crew to seat ratio; crews; aircrew manning factor; budgeted crews; required hours/crew/mo; total hours required; total hours actual; actual cost per hour; total cost actual; actual hours/mo/crew and percent required hours funded. Additional information on OP-20 display is in the following paragraphs.

b. Methodology. The OP-20 shows: required hours, budgeted hours, crew seat ratios, force structure, budgeted hours computed as a percentage of requirement; cost per hour by T/M/S; total costs by budget line item; and total T/M/S costs.

2. Specific Aircraft. Those aircraft, i.e., tactical, which serve a mission-essential function determined by the methodology described below. Tactical Aircraft (TACAIR) OP-20 Methodology, by year, schedule, LANT/PAC/Type/Model/Series (T/M/S):

a. FY 2008 Final. Indicates the fiscal year of the display and the nature of the submission.

b. Schedule "A", TACAIR/ASW. Indicates the purpose of the funding. In this case the funding is for the operation of TACAIR squadrons and the training of associated squadron, augment (staff), supervisory, and MAWTS crews.

c. LANT. Indicates the claimant (command funded), in this case, MARFORCOM.

d. (T/M/S). This column displays each aircraft by T/M/S for which funding has been budgeted.

e. Forces. This figure is based on forces programmed in the Aircraft Program Data File (ADPF). Funding is based on Primary Mission Aircraft Authorized (PMAA) as reflected in that document. This number will be an average if the number of aircraft authorized changes during the fiscal year.

f. Crew Seat Ratio. The crew seat ratio is computed by dividing T/O pilots by PMAA and multiplying by of .9, since funding is programmed for 90 percent of T/O.

g. Crews. This number is computed by multiplying the number of aircraft times the crew seat ratio. This number should represent 90 percent of the T/O number of crews.

h. Aircrew Manning Factor (AMF). It will be determined based on current actual manning. This number represents the current percentage of T/O that is actually manned. If actual manning is less than 100 percent of authorized, this number will be less than 1.000.

i. Budgeted Crews. This represents the number of aircrew funded.

j. Req Hrs/Crew/Mo. This number represents the total hours required per month to keep an aircrew core capable. These hourly requirements are determined by the CCRM, and include Training and Readiness (T&R) syllabus requirements.

k. Total Hours Required. This number is calculated by multiplying the number of crews, multiplied by the hours/crew/month, multiplied by 12.

l. Total Hours Actual. This number is a function of hours flown in the fiscal year.

m. Actual Cost Per Hour (CPH). This number represents the total executed CPH and includes fuel CPH, maintenance CPH, Aviation Depot Level Repairable (AVDLR) CPH, and contract maintenance CPH.

n. Total Cost Required. This number is computed by multiplying the total hours required by the CPH.

o. Total Cost Actual. This number is computed by multiplying the total hours flown by the CPH.

p. Actual Hours/Mo/Crew. This figure represents the monthly execution of hours per crew for the fiscal year. It is computed by dividing actual hours by crews divided by 12.

q. Percent Required Hours Funded. This represents the percentage of total required hours funded. It is computed by dividing the total hours funded by total hours required and then multiplying by 100.

3. Fleet Air Training (FAT) OP-20 Methodology. The FHP OP-20 display and main methodology categories are for: Tactical Aircraft; Fleet Air Training (FAT) OP-20 Methodology; Fleet Air Support (FAS) OP-20 Methodology and Reserve Defined Methodology. OP-20 is a Department of the Navy (DON) planning document published by the OPNAV N43 for the Flying Hour Program (FHP) several times per year to establish the annual flying hours by Type/Model/Series, which is used for FHP funding and fleet planning. Requirements are computed by using the Core Competency Resource Model (CCRM) and revised with MARFORs.

a. Display. The OP-20 display and methodology schedules (not including Tactical Aircraft) are determined by the following standard criteria: FY; Schedule; LANT/PAC/; T/M/S; Crew to seat ratio; crews; aircrew manning factor; budgeted crews; req hours/crew/mo; total hours required; total hours actual; actual cost per hour; total cost actual; actual hours/mo/crew/ and percent required hours funded. Additional information is explained in the following paragraphs.

b. Methodology. The OP-20 shows: required hours, budgeted hours, crew seat ratios, force structure, budgeted hours computed as a percentage of requirement; cost per hour by T/M/S; total costs by budget line item; and total T/M/S costs.

4. Specific Training Criteria. Fleet Air Training (FAT) OP-20 Methodology is the following: FY; Schedule; T/M/S; number of aircraft; Categories: (I, II, III, IV, V); no PIL, Syllabus hours; pilot hours; no Naval Flight Officer(s); syllabus hours; NFO hours; task hours; total hours required; total hours budgeted; budgeted cost per hour; total cost required; in millions required; and percent required hours funded.

a. FY 2008 Budgeted. Indicates the fiscal year of the display and the nature of the submission.

b. Schedule "B", 1A2A. Indicates the purpose of the funding. In this case the funding is for the operation of FRS squadrons and the training of associated squadron students.

c. T/M/S. This column displays each aircraft by T/M/S for which funding has been budgeted.

d. Forces. This figure is based on forces programmed in the APDF. Funding is based on PMAA as reflected in that document. This number will be an average if the number of aircraft authorized changes during the fiscal year.

e. Category (CAT). This represents the number of students within each type of syllabus.

f. CAT I. First Tour Aviator or First Tour in Type (Warfare Transition). Receives 100 percent of Syllabus. For USMC, this equates to the basic transition Programs of Instruction (POIs).

g. Second Tour in Type Aircraft. Receives approximately 75 percent of CAT I Syllabus. For USMC this equates to the Conversion POI.

h. Third Tour (Commanding Officer or Executive Officer). Receives approximately 50 percent of CAT I syllabus. (For transition pilots, the need and/or length of the FRS syllabus depends on the complexity of either the weapons systems and/or the flight characteristics of the type aircraft to which they are transitioning). For USMC, this equates to the Refresher POI.

i. CAT IV. Typically, a Naval Aviation Training and Operating Procedures Standardization (NATOPS) check or enough training to safely operate the aircraft without supervision. Receives about 10-20 percent of the CAT I syllabus. For USMC, this equates to a Modified Refresher Program.

j. CAT V. A specialized syllabus that does not meet the criteria of the first four categories. Other POIs not described above.

k. Number of Pilots. This number represents the pilot throughput for the current fiscal year. Estimated number of pilots who will complete the syllabus.

l. Syllabus Hours. The number of hours required to complete the syllabus for a particular category.

m. Pilot Hours. This number is computed by multiplying the pilot throughput by the syllabus hours.

n. Number of Naval Flight Officer(s) (NFO). This number represents the NFO throughput for the current fiscal year. Estimated number of NFOs who will complete the syllabus.

o. Syllabus Hours. The number of hours required to complete the syllabus for a particular category.

p. NFO Hours. This number is computed by multiplying the NFO throughput by the syllabus hours.

q. Task Hours. Those hours unrelated to a specific syllabus.

r. Total Hours Required. This number is calculated by adding the pilot hours, NFO hours, and Task hours.

s. Total Hours Budgeted. This number represents the number of hours programmed for the current fiscal year.

t. Budgeted Cost Per Hour. This number represents the total budgeted CPH and includes fuel CPH, maintenance CPH, AVDLR CPH, and contract maintenance CPH.

u. Total Cost Required. This number is computed by multiplying the total hours required by the CPH.

v. In Millions Budgeted. This number is computed by multiplying the programmed hours by the CPH.

w. Percent Required Hrs Funded. This is the percentage of total required hours funded. It is computed by dividing the total hours funded by total hours required, and then multiplying by 100.

5. Fleet Air Support (FAS) OP-20 Methodology. The FHP OP-20 display and main methodology categories are for: Tactical Aircraft; Fleet Air Training (FAT) OP-20 Methodology; Fleet Air Support (FAS) OP-20 Methodology and Reserve Defined Methodology. OP-20 is a Department of the Navy (DON) planning document published by the OPNAV N43 for the Flying Hour Program (FHP) several times per year to establish the annual flying hours by Type/Model/Series, which is used for FHP funding and fleet planning. Requirements are computed by using the Core Competency Resource Model (CCRM) and revised with MARFOR (Commander, Marine Forces Reserve) inputs.

a. Display. The OP-20 display and methodology schedules (not including Tactical Aircraft) are determined by the following standard criteria: FY; Schedule; T/M/S; UTIL, number of aircraft; budgeted cost per hour; total hours required; total costs required; total hours budgeted; total costs budgeted; and percent required hours funded. Additional information is explained in the following paragraphs.

b. Methodology. Fleet Air Support Reserve Manpower Criteria determined by the methodology described below.

(1) FY 2008 Budgeted. Indicates the fiscal year of the display and the nature of the submission.

(2) Schedule "C", 1A1A. Indicates the purpose of the funding. In this case the funding is for the operation of FAS squadrons and the training of associated squadron pilots.

(3) T/M/S. This column displays each aircraft by T/M/S for which funding has been budgeted.

(4) UTIL. This column displays the number hours executed per aircraft per month.

(5) Forces. This figure is based on forces programmed in the APDF. Funding is based on PMAA as reflected in that document. This number will be an average if the number of aircraft authorized changes during the FY.

(6) Budgeted Cost Per Hour. This number represents the total budgeted CPH and includes fuel CPH, maintenance CPH, AVDLR CPH, and contract maintenance CPH.

(7) Total Hours Required. This number is calculated by using historical logistics and support execution and known training requirements.

(8) Total Costs Required. This number is computed by multiplying the total hours required by the CPH.

(9) Total Hours Budgeted. This number represents the number of hours programmed for the current fiscal year.

(10) Total Costs Budgeted. This number is computed by multiplying the programmed hours by the CPH.

(11) Percent Required Hours Funded. This represents the percentage of total required hours funded. It is computed by dividing the total hours funded by total hours required and then multiplying by 100.

6. Reserve Defined Methodology. The FHP OP-20 display and main methodology categories are for: Tactical Aircraft; Fleet Air Training (FAT) OP-20 Methodology; Fleet Air Support (FAS) OP-20 Methodology and Reserve Defined Methodology hours budgeted; total costs budgeted; and percent required hours funded. Additional information is explained in the following paragraphs.

a. Display. OP-20 is a Department of the Navy (DON) planning document published by the OPNAV N43 for the Flying Hour Program (FHP) several times per year to establish the annual flying hours by Type/Model/Series, which is used for FHP funding and fleet planning. Requirements are computed by using the Core Competency Resource Model (CCRM) and revised with MARFOR (Commander, Marine Forces Reserve) inputs.

b. Methodology. The OP-20 display and methodology schedules (not including Tactical Aircraft) are determined by the following standard criteria: FY; schedule; UTIL; Number of aircraft; budgeted cost per hour; total hours required; total costs budgeted; and percent required hours funded.

(1) FY 2008 Budgeted. Indicates the FY of the display and the nature of the submission.

(2) Schedule "D", 1A1A. Indicates the purpose of the funding. In this case the funding is for the operation of Reserve squadrons and the training of associated squadron pilots.

(3) T/M/S. This column displays each aircraft by T/M/S for which funding has been budgeted.

(4) UTIL. This column displays the number hours executed per aircraft per month.

(5) Forces. This figure is based on forces programmed in the APDF. Funding is based on PMAA as reflected in that document. This number will be an average if the number of aircraft authorized changes during the FY.

(6) Budgeted Cost Per Hour. This number represents the total budgeted CPH and includes fuel CPH, maintenance CPH, AVDLR CPH, and contract maintenance CPH.

(7) Total Hours Required. This number is calculated by using historical logistics and support execution and known training requirements.

(8) Total Costs Required. This number is computed by multiplying the total hours required by the CPH.

(9) Total Hours Budgeted. This number represents the number of hours programmed for the current fiscal year.

(10) Total Costs Budgeted. This number is computed by multiplying the programmed hours by the CPH.

(11) Percent Required Hours Funded. This is the percentage of total required hours funded. It is computed by dividing the total hours funded by total hours required and then multiplying by 100.

UNCLASSIFIED
U. S. ATLANTIC FLEET
FY: 2008

Department of the Navy OP-20
Analysis of Navy Flying Budget BackUp Exhibit

Version: 2061 09- -97 -PB (PRESIDENTIAL BUDGET)

GEN PURPOSE FORCES

Program Element	TMS	Forces	Util	Hours	Cost Per Hour / Annual Cost, in Millions: FF/Fuel	FA/DLR	FM/Maint	FW/CONTRACT	FO/OTHER	ADJ	Total	Hrly Fuel Cons Rate
02 06110 M	AV-8B	42.0	21.054	10611	1809.25 19.198	4717.18 50.054	1377.25 14.614	0.00 0.000	0.00 0.000	0.00 0.000	7903.68 83.866	19.670
PE 0206110M TOTAL:		**42.0**	**21.054**	**10611**	**1809.25 19.198**	**4717.18 50.054**	**1377.25 14.614**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**7903.68 83.866**	**19.670**
02 06121 M	CH-46E	48.0	11.762	6775	418.51 2.835	3175.69 21.515	1284.10 8.700	0.00 0.000	0.00 0.000	0.00 0.000	4878.30 33.050	4.550
	MV-22B	24.0	29.538	8507	1202.18 10.227	77.06 0.656	447.94 3.811	0.00 0.000	0.00 0.000	0.00 0.000	1727.18 14.693	13.070
PE 0206121M TOTAL:		**72.0**	**17.688**	**15282**	**854.75 13.062**	**1450.78 22.171**	**818.64 12.510**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**3124.17 47.744**	**9.293**
02 06122 M	CH-53E	40.0	17.913	8598	1010.22 8.686	7825.98 67.288	2136.68 18.371	0.00 0.000	0.00 0.000	0.00 0.000	10972.88 94.345	10.983
PE 0206122M TOTAL:		**40.0**	**17.913**	**8598**	**1010.22 8.686**	**7825.98 67.288**	**2136.68 18.371**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**10972.88 94.345**	**10.983**
02 06127 M	KC-130J	12.0	36.125	5202	1476.37 7.680	302.29 1.573	204.22 1.062	0.00 0.000	0.00 0.000	0.00 0.000	1982.88 10.315	16.051
PE 0206127M TOTAL:		**12.0**	**36.125**	**5202**	**1476.37 7.680**	**302.29 1.573**	**204.22 1.062**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**1982.88 10.315**	**16.051**
02 06131 M	AH-1W	42.0	17.982	9063	220.84 2.001	3186.36 28.878	1331.86 12.071	0.00 0.000	0.00 0.000	0.00 0.000	4739.06 42.950	2.401
	UH-1N	21.0	19.714	4968	215.88 1.072	1494.11 7.423	1389.21 6.902	0.00 0.000	0.00 0.000	0.00 0.000	3099.20 15.397	2.347
PE 0206131M TOTAL:		**63.0**	**18.560**	**14031**	**219.08 3.074**	**2587.18 36.301**	**1352.17 18.972**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**4158.43 58.347**	**2.382**
02 06134 M	FA-18A	24.0	24.896	7170	2340.89 16.784	3312.42 23.750	1387.75 9.950	0.00 0.000	0.00 0.000	0.00 0.000	7041.06 50.484	25.450
	FA-18C	24.0	24.896	7170	2385.96 17.107	2813.48 20.173	1821.05 13.057	0.00 0.000	0.00 0.000	0.00 0.000	7020.49 50.337	25.940
	FA-18D	24.0	26.378	7597	2525.49 19.186	3274.65 24.878	1256.41 9.545	0.00 0.000	0.00 0.000	0.00 0.000	7056.55 53.609	27.457
PE 0206134M TOTAL:		**72.0**	**25.390**	**21937**	**2419.55 53.078**	**3136.26 68.800**	**1483.89 32.552**	**0.00 0.000**	**0.00 0.000**	**0.00 0.000**	**7039.70 154.430**	**26.305**

Figure 1-1. -- Department of the Navy OP-20 Display Analysis of Navy Flying Budget BackUp Exhibit

Chapter 2

Core Competency Resource Model Guidelines

1. General

a. In 1997, the Marine Corps introduced the Marine Aviation Campaign Plan (MACP), and with it, the Sortie Based Training Program (SBTP). The intent was to evolve from a process where readiness is measured purely in terms of hours flown to one where readiness is based upon the actual training achievements of the sortie. Using the specific Type/Model/Series (T/M/S) T&R requirements as the guide, the training achievements of a sortie can be directly measured in terms of their success in meeting Training and Readiness (T&R) goals. Taken collectively, a squadron's historical execution of T&R-coded sorties builds a picture of that squadron's readiness as defined by its own T&R. This is done by measuring Core Skill Proficiency, Combat Leadership, Instructor Training, and other specific Requirements, Qualifications and Designations delineated in the individual T/M/S T&Rs. In order to accurately determine its annual flight hour requirement for training, and the monetary resources necessary to meet that requirement, the Marine Corps developed the Core Competency Resource Model (CCRM). This model ensures adequate funding for the future needs of the USMC FHP by quantifying the peacetime training requirements for each T/M/S T&R.

b. The CCRM links every T&R sortie to unit readiness, which is defined by core proficiencies that are stated in each T&R Manual. In essence, the CCRM calculates a generic squadron's flight hour requirements, directly linking the FHP, T&R syllabi, and readiness reporting (SORTS/DRRS, CMTR and M-SHARP), as was directed per the MACP. Specifically, the CCRM, which has been accredited and validated by the Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC), generates annual flight hour and sortie requirements (broken down by training, support, and operational sorties) for maintaining selected T-Level readiness ratings. DC AVN (APP) utilizes this CCRM data as the primary validation tool when providing input to the Navy's budgeting document, known as the OP-20. Operational units may use the CCRM output as a resource to help develop their own annual flying hour plan, although it is not meant to be a squadron commander's sole tool for determining the squadron's annual flight hour requirement. DC AVN is the advocate for the CCRM and oversees its implementation, while Training and Education Command's (TECOM) Aviation Training Branch (ATB) is the custodian of the model, ensuring its accuracy and alignment with current T&R manuals. The most current CCRM and its applicable operating directions are available on the TECOM website at http://www.tecom.usmc.mil/atb/ccrm. When using the CCRM, it is imperative that operational planners ensure they have the most current model (by comparing the date of the CCRM with the latest syllabus date), since T&R manuals often change and the sortie requirement that populates the model changes concurrently. Inputs may be made on the website and outputs are immediately given. Saving the data as a file disables the functionality of the website, but does provide a screenshot of the final input and output.

2. CCRM Uses

a. Headquarters. The CCRM produces a notional squadron's annual flight hour requirement according to the T/M/S' T&R training requirements and individual breakdown of its aircrew. The primary inputs to the CCRM are: 1) current T/M/S T & R Manuals, 2) average sortie duration, 3) projected number and type of fleet aircrew (basic, refresher, maintain syllabus etc). The average sortie durations are listed in reference (c). This average sortie

length is applied to all of the sorties in the model, and it represents an average of the mix of various sortie lengths from historical T/M/S execution. The T&R standards are only changed through a conference, so the most dynamic and key element is the number and type of aircrew. HQMC uses the CCRM to create rough requirements, or "benchmarks," for each T/M/S; in other words, a flight hour requirement for a generic squadron (manned with a standard number and type of aircrew equal to 90% of the squadron's T/O for aircrew) within each T/M/S. This benchmark is not necessarily the correct flight hour requirement for each squadron within that particular T/M/S, but in aggregate, it provides a realistic requirement for each T/M/S. By multiplying the CCRM output by the number of squadrons flying that specific T/M/S, HQMC can provide the annual training requirement to the DON programming and budgeting offices in order to ensure that the entire USMC FHP is funded at an appropriate level.

b. Fleet Operational Planners. The CCRM provides one of many tools available to operations officers to use when developing SBTPs; however, it does not take the place of proper operational planning and sortie management. The primary input for squadron operations officers is the number and type of aircrew (basic, refresher, maintain syllabus). It is incumbent upon each unit to input their current and projected number of crews, averaged through the entire year, to give them a rough flight hour requirement particular to their unit. The CCRM provides a starting point for operational planners to deviate from in determining their total annual requirement, and it is up to each unit to tailor this requirement to their individual personnel breakdown and training requirements. Operational planners must take into account all factors that affect training in order to develop a monthly SBTP that is realistic and executable, while striving to meet readiness goals. Most operational planners will find that their specific squadron will require either more or fewer sorties and hours than would be required by the CCRM due to their unique situation. Factors that will affect a squadron's sortie and flight hour planning include (but are not limited to):

(1) Type and number of aircrew that are part of, or will be part of, the squadron.

(2) Squadron TEEP and the sorties needed to execute the travel to, from, and during deployed and detachment operations. Deployments in support of GWOT may require that certain Core Skills in the T&R Manual require more sorties than the refly calls for, or an "Operational Focus," while other Core Skills may temporarily be allowed to fall out of currency until the contingency deployment is complete.

(3) Availability of aircraft, simulators, ranges, ordnance and other training resources used in T&R events. Planned maintenance days and traditionally active periods of inclement weather can be planned for based on historical experience.

(4) Squadron Training Plans, including Instructor work-ups, Qualifications, and Designations.

(5) Functional Test Flights, test sorties and ferry flights.

(6) Special events that affect flight scheduling such as Changes of Command, holidays and mandatory technical or ground training for aircrew and maintenance Marines.

(7) Expected fragged events and support flight requirements.

(8) Different sortie lengths based upon different training phases, and the availability of tankers and hot-pits for scheduling.

3. CCRM Inputs

a. Primary unit-level inputs are in the manning input section (lower left green portion of the main page). See Figure 32-1. Primary outputs are the numbers of sorties, flight hours, sorties per crew per month and hours per crew per month (H/C/M) required to maintain a specific training level (T-1 through T-4, which are located on the upper left portion of the page in blue, green yellow and red).

b. Operational planners can input their squadron aircrew makeup (number of basics, refresh, maintain syllabus etc). This is essential since the flight hour requirement for a "basic" (new aircrew) is larger than the flight hour requirement for a "maintain" (regular squadron aircrew) or a "refresher" syllabus.

c. The total number of aircrew should be the average of what a unit expects to have over the course of the year. Obviously, no squadron can completely predict its manning levels or who exactly will join or leave the squadron, but a best guess based upon MAG and squadron personnel planning is appropriate and applicable in determining the squadron's aircrew numbers.

Aircrew Categories:

Basic- New pilot responsible for flying the entire syllabus.
Refresher- Returning aircrew responsible for flying the R-coded portion of the syllabus.
Maintain- Everyday squadron aircrew, responsible for flying the maintain syllabus within the appropriate refly intervals.
Augment- Aircrew working in temporary staff billets that the squadron plans to take to war with them, fly the maintain syllabus. Does not apply to all T/M/S.
Staff- Aircrew in permanent staff positions assigned by the MAW to fly with the squadron.

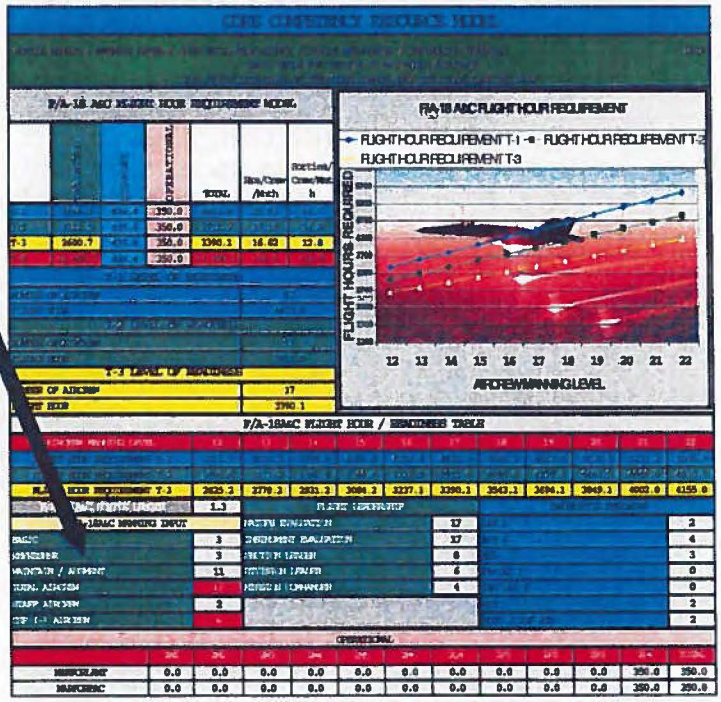


Figure 2-1. -- CCRM User Interface Page

d. Projected number of Instructor Training and other specific Requirements, Qualifications and Designations, input by operational planner at the bottom of the page. The model will calculate a number of sorties and hours to correspond with all of the T&R requirements to build a new Instructor, Qualification or Designation.

e. Expected Operational Hours are located at the bottom of the model in grey. Utilizing historical information from NALCOMIS/SARA/M-SHARP, and

including known TEEP operational commitments, the planner can change the expected Operational Flight Hour requirement. The number that is currently in the model is an historical squadron average based upon the T/M/S' last five years' of execution data.

f. The CCRM produces an annual squadron flight hour requirement for different training levels. The Marine Corps FHP is funded to support the flight hour requirement that equates to a readiness of T-2. For operational planners, this is the level of readiness that ensures a squadron is prepared to deploy and can meet all required mission areas at the required level and tempo. Although the CCRM provides the annual hour and sortie requirement, a monthly breakdown of flight hours and H/C/M particular to each individual unit should be produced as part of a SBTP per enclosure chapter (56).

4. CCRM Terms of Reference. The following are terms of reference that are essential to understanding the CCRM, its integration with the T&R Manual, FHP, and SBTP as well as its tie to unit level readiness.

a. Mission Essential Task List (METL). The unit METL is a standardized list of tasks a unit must be able to accomplish during combat/contingency operations.

b. Core Capability. A standardized measure of performance that a Marine Air Ground Task Force commander should expect during sustained contingency/combat operations. Combat flight operations define core capability in terms of a daily-sustained sortie rate, or operational coverage, in support of a METL.

c. Combat Leadership. Unit competency in leadership is defined in terms of minimum numbers of required tactical leaders certified per T&R standard and designated by the unit commanding officer.

d. Core Skill Proficiency (CSP). The number of individuals, or crews, required to be proficient in each core skill. An individual is considered CSP when they have completed, and maintain currency in, the requisite T&R syllabus for that particular skill.

e. Core Model Minimum Requirement (CMMR). The minimum number of crews necessary in each particular core skill for a unit to accomplish its mission and METLs. CMMR and flight leadership requirements are the foundation of a unit's SBTP and flying hour requirement, as well its direct tie to unit T-Level readiness.

Chapter 3

Marine Corps Sortie Based Training Program (SBTP)

1. General. The Marine Corps SBTP allows squadron commanders to develop an annual SBTP that reflects their unit's Training Exercise Employment Plan (TEEP) and unit Training and Readiness (T&R) requirements to train mission skill proficient aircrews and flight leads per their unit T&R Core Model Minimum Requirement (CMMR) to attain and maintain a T-2 level of readiness per reference (c). A T-2 level of readiness allows a unit to fulfill its Mission Essential Task output standard in support of a Marine Air Ground Task Force or Joint Force Commander.

a. Participation. All active and reserve Marine Corps flying squadrons shall participate in the SBTP, including tactical fleet squadrons, Fleet Replacement Squadrons (FRSs), and Operational Support Aircraft (OSA) activities, with the exception of HMX-1, MAWTS-1, and VMFAT-101. The unique nature and mission of FRS and OSA activities may prevent those units from meeting or sustaining CMMR requirements. However, their participation in the SBTP is necessary to provide DC AVN and resource planners the data required to support accurate FHP budget allocations.

b. Scope. The SBTP manages forecast and execution flight hours and sorties for each Type/Model/Series (T/M/S) the squadron operates. In addition, the SBTP manages core skills, mission skills, and flight leadership data for crewmembers in each T&R syllabus associated with those TMSs including pilots, Naval Flight Officers (NFOs), and enlisted aircrew. For example, in an HMLA squadron, SBTP manages AH-1W and UH-1N flight hours and sorties, as well as information about AH-1W Pilots, UH-1N Pilots, UH-1N Crew Chiefs, and UH-1N Aerial Observer/Gunners. Some T/M/Ss are grouped together for SBTP reporting in order to align the structure of T/M/S T&R manuals. The KC-130 F, R, and T are grouped together as one T/M/S group, but the KC-130J is separate. The F/A-18 A and C are grouped together, but the F/A-18D is separate. The CH-53 D and E are treated separately as are the AH-1W, AH-1Z, UH-1N and UH-1Y.

c. M-SHARP. The Marine Corps Sierra-Hotel Aviation Readiness Program (M-SHARP) is the automated system used throughout Marine Aviation to manage the Training and Readiness (T&R) program per NAVMC 3500.14 and is the authoritative data source for documenting all Marine Corps aviation flight records (NAVFLIRs), aircrew T&R data, and readiness reporting as required. M-SHARP is also the management tool for the Sortie Based Training Program (SBTP).

2. SBTP Reporting. There are two Marine aviation SBTP reporting requirements; the Annual Unit SBTP Forecast submission, and the Monthly SBTP Execution Report.

a. Annual Unit SBTP Forecast. The annual unit SBTP forecast is developed at the squadron level, then reviewed and approved by the Marine Aircraft Group (MAG)/Marine Aircraft Wing (MAW)/Marine Corps Installations (MCI)/Marine Force (MARFOR)/DC AVN chain of command. DC AVN (APP-2) consolidates the MARFOR T/M/S inputs into a single Marine Aviation SBTP by T/M/S. Unit SBTP Forecasts shall be submitted by squadrons NLT 01 August each year for the following fiscal year (FY). DC AVN (APP-2) utilizes the T&R T/M/S Core Competency Resource Models (CCRM) and the MARFOR T/M/S SBTP submissions for the final development of the Marine aviation Tactical

Aircraft (TACAIR) Flying Hour Program (FHP) requirement for DC AVN approval prior to submission to OPNAV N43.

(1) Unit CCRM, TEEP, SBTP Interface. Unit commanders may utilize the appropriate T/M/S CCRM to help determine annual sorties and flight hours required per the unit's projected aircrew (basic, refresher, maintain, augment, staff) assignments. Each unit will have a unique CCRM requirement and TEEP that provides the initial input during the development of the annual unit SBTP sortie and FHP requirement. The CCRM represents a starting point for the unit and the following represents a squadron operational planner's guidelines for developing an accurate, executable flying hour plan:

(a) Type and number of aircrew present or projected to join the squadron.

(b) Squadron TEEP and the sorties needed to travel to, from, and during deployment or detachment operations. Deployments in support of Global War on Terrorism (GWOT) (or other contingencies) may require greater precision in certain mission skill sets (i.e. ordnance delivery in urban environments) and necessitate more sorties to refine these mission skills than the T&R dictates. Other mission skills may be allowed to expire temporarily until the contingency deployment is complete.

(c) Availability of aircraft, simulators, ranges, ordnance and other training resources used in T&R events. Planned maintenance days and traditional periods of inclement weather can be planned for based on historical data.

(d) Squadron Training Plans, including Instructor work-ups, Qualifications, and Designations.

(e) Functional Test Flights, test sorties and ferry flights.

(f) Special events that affect flight scheduling such as Changes of Command, holidays and mandatory technical or ground training for aircrew and maintenance Marines.

(g) Expected fragged events and support flight requirements.

(h) Different sortie lengths based upon different training phases, and the availability of tankers and hot-pits for scheduling.

(2) SBTP, OP-20 Reconciliation. During the approval process, operations/G-3 departments at all levels must reconcile their subordinate commands' SBTP inputs against projected flight hour controls in the OP-20 in order to ensure that flight hour allocations match priorities and remain within fiscal constraints. Once validated by the MARFOR and forwarded to DC (AVN), the SBTP defines the flight hour goal for a squadron. While deviations from the plan on a month-to-month basis will be unavoidable as the TEEP and squadron composition change, squadrons should try to meet their quarterly totals and ensure their MAG/HHQ is aware of potential shortcomings or overages in flight hour execution. Deviations from projected delivery schedules of replacement aircrew may force a unit to substantially shift flight hours to accommodate late arrivals. Revised flight hour consumption to accommodate personnel sourcing must be coordinated with the MAG and closely monitored by the Wing to ensure resources are adequately re-allocated prior to the close of the Fiscal Year. Only the MAG (with the Wing and MARFOR concurrence) or MCI (with MARFOR concurrence) can re-allocate hours to different units or T/M/S. MAGs, Wings and MCIs will not alter their annual

total without MARFOR approval, with notice to HQMC AVN as this occurs. To help streamline this process, an annual mid-year review will be conducted by the MARFORs in order to ensure that flight hour allocations are matched with priorities and remain within budget constraints. Changes to the SBTP as a result of mid-year review must be coordinated with HQMC and USFF (if needed).

(3) Contingency Operations. For units scheduled to deploy to known contingency operations during the upcoming FY, the sorties and flight hours forecast for those months should not drastically exceed a notional peacetime deployment flight hour profile. This is because the SBTP is a tool for measuring training and qualification levels within a unit. Contingency hours flown in excess of the SBTP FHP are covered via supplemental funding and defined as incremental contingency hours. Squadrons report total contingency hours on their SBTP and budget OPTAR reports. Most importantly, MARFORs should provide guidance to deploying units for the number of hours they should forecast when deploying in support of a contingency operation. Incremental contingency hours in excess of forecast hours will be calculated in accordance with reference (a) and chapter 4 of this Order.

(4) M-SHARP Procedures for SBTP Forecast Submission. Squadrons will use M-SHARP to enter and submit their annual SBTP forecast and the chain of command will use M-SHARP to review/approve squadron SBTP forecasts.

(a) Submit Procedures. Participating squadrons may edit and save the SBTP forecast as frequently as needed until the forecast is submitted. Squadrons will submit their forecast by selecting the "Submit" button on the SBTP Forecast page in the M-SHARP Setup module. Once submitted, squadrons will be unable to modify their SBTP forecast unless it is unsubmitted by a senior command, generally the MAG or higher. Senior commands will then review subordinate squadron annual SBTP forecast submissions. Note: SBTP forecasts are not routed to each level of the chain of command separately. The data is made available to all senior commands simultaneously. Therefore, only squadrons will have the authority to submit a SBTP Forecast in M-SHARP in order to prevent a senior command from modifying a submission without the squadron's knowledge.

(b) Unsubmit Procedures. Once a squadron's SBTP forecast is submitted, no command is able to edit it unless the forecast is unsubmitted by selecting the "Unsubmit" button on the SBTP Forecast page in the M-SHARP Setup module. While reviewing the SBTP forecasts, any senior command may unsubmit a squadron's forecast then coordinate modifications needed via normal communication channels with the squadron (phone, email, etc). Only MAGs and above will have the authority to unsubmit a forecast in order to prevent a squadron from modifying a previously-submitted forecast without the chain of command's knowledge. All editing of SBTP forecasts will occur at the squadron level. It is inappropriate for a single command or person to have both submission and unsubmission authority.

b. Monthly Unit SBTP Execution Report. The monthly unit SBTP execution report has two distinct purposes. First, it provides squadrons and above the data required to track unit SBTP and FHP execution. Second, it provides HQMC the standardized T/M/S Marine Aviation Readiness metrics for the Marine Corps Current Readiness Assessment System (MCCRATS) under the Naval Aviation Enterprise (NAE).

(1) The M-SHARP Procedures for Monthly Unit SBTP Reports is t. The monthly SBTP Execution Report, which contains the squadrons' forecast and execution data together, is drawn directly from squadron M-SHARP databases with no action required by squadrons except initial data setup/baselining and

annual SBTP forecast submission. Deployed units using the M-SHARP Deployable installation will continue to participate in the SBTP provided they submit M-SHARP Synchronization of Portable Installation (SPIN) files per reference (o). SPIN files automatically populate the global M-SHARP database with data required by the SBTP. There are no submit/unsubmit procedures for the monthly SBTP Execution Report. SBTP Execution Reports are accessible in M-SHARP to designated squadron personnel and key individuals at each unit in the chain of command.

3. Flight Hour/Sortie Calculations. For SBTP purposes, it is necessary to specify the means by which flight hours and sorties are derived in order for commanders to make accurate forecast projections.

a. USMC Sortie Definition Standardization. It is imperative that all Flying Squadrons have a single definition of a USMC sortie if Marine Aviation is going to accurately plan and report the SBTP and FHP. The definition of a USMC Sortie is identical to the definition of a Flight, in accordance with reference (e): "For operational purposes, a flight is one or more aircraft proceeding on a common mission. For recording and reporting purposes, a flight begins when the aircraft first moves forward on its takeoff run or takes off vertically from rest at any point of support and ends after airborne flight when the aircraft is on the surface and either: a) the engines are stopped or the aircraft has been on the surface for 5 minutes, whichever comes first, b) a change is made by the pilot in command. For helicopters, a flight begins when the aircraft lifts from a rest point or commences ground taxi and ends after airborne flight when the rotors are disengaged or the aircraft has been stationary for 5 minutes with rotors engaged." Essentially, the number of sorties will equal the number of legs recorded on the Naval Aviation Flight Record (NAVFLIR) and is not directly linked to number of flight hours or T&R codes completed. The following are some examples of both fixed wing and rotary wing sorties:

(1) Example #1, Fixed-Wing Sortie. A single F/A-18 departs NBC for G-10 on a Close Air Support mission in support of ground units. The aircraft drops ordnance at G-10 and then flies to NKT and hot refuels in 15 minutes. After refueling, the aircraft returns to G-10 and drops a different type of ordnance and then flies to NBC and lands, mission complete. This event would be 2 sorties and logged as 2 legs on a single NAVFLIR.

(2) Example #2, Fixed-Wing Sortie. A single KC-130 departs NKX for the training area. Once in the training area the aircraft aerial refuels (AR) a section of F/A-18s and then aerial refuels a section of CH-53s. Upon AR completion, the aircraft returns to NKX and completes an annual pilot instrument check. This event would be 1 sortie and logged as 1 leg on a single NAVFLIR.

(3) Example #3, Rotary-Wing Sortie. A section of AH-1s departs Camp Pendleton and flies to Twenty-nine Palms, lands and hot refuels, spending 7 minutes on the deck. Then the aircraft fly CAS ISO ground units, lands and hot refuels again at NXP spending 10 minutes on the deck. After the second hot refuel, the aircraft flies to NFG and lands mission complete. This event would be a total of 6 sorties: 1 NAVFLIR for each aircraft, each NAVFLIR with 3 legs.

(4) Example #4, Rotary-Wing Sortie. A single CH-46 departs NCA and flies to Camp Lejeune for two ground troop inserts. The first insert requires 6 minutes on the ground to load troops and only 2 minutes in the zone to unload troops before returning for the second insert which follows the same timeline. After unloading troops for the second insert, the aircraft then

flies to NCA and hot refuels spending 8 minutes on the deck. After refueling, the aircraft flies a NATOPS check at NCA and then lands mission complete at NCA. This event would be 4 sorties and logged as 4 legs on a single NAVFLIR.

b. SBTP Flight Hour Categories. The SBTP and FHP require executed flight hours to be accurately tracked within 4 specific categories: Training, Support, Operational, and Contingency. These SBTP Flight Hour Categories are captured directly by M-SHARP and are no longer associated with or derived from Total Mission Requirement (TMR) codes. Aircrew shall attribute all flight time to one or more of these categories.

(1) Training Hours. Includes all flight training in accordance with T/M/S T&R manuals (initial or refly), flight leadership, and OPNAV-directed instrument training minimums. Whenever any member of the crew is receiving either an initial T&R credit or an update of a T&R code, they should log training hours specifically for the training portion of the sortie, including when participating in a frag or other operational sortie. The key difference between a training and operational sortie is if any member of the flight is able to log a T&R code, whether it is initial or refly, that portion of the sortie is logged as training. The remaining portion of the flight, including the transit, is logged as operational time to capture the external requirements imposed on fleet units. The only exception is for sorties flown in support of a contingency or combat operation, in which case they should be considered contingency hours. Note that any dedicated training flight that is aborted in-flight or is incomplete for any reason shall be attributed to support hours.

(2) Support Hours. Includes all squadron-generated sorties that do not fit the criteria for training and are not specifically tasked by an outside command or agency. Specific examples include FCFs, FCP under training, instructor under training (IUT), flights conducted at MAWTS-1 during a Weapons and Tactics Instructor Course, and non-training ferry/transit flights. Any dedicated training flight that is aborted in-flight or is incomplete for any reason shall be attributed to support hours.

(3) Operational Hours. Includes all squadron-generated sorties that do not fit the criteria for training and are specifically tasked by an outside command or agency. If aircrew T&R syllabus training is conducted in accordance with operational flights, log any non-T&R producing time as operational once T&R requirements have been satisfied or if there is significant non-T&R transit or loiter time involved.

(4) Contingency Hours. Includes all sorties flown in support of a contingency or combat operation, whether or not a T&R code can be logged. Assault support aircraft operating in geographic areas formally designated as contingency should log contingency hours for every flight in support of that contingency.

c. Aircraft Unit Assignments. Flight hours and sorties flown by an individual aircraft are always attributed to the unit that owns the aircraft in NALCOMIS/M-SHARP and NOT by the unit to which the personnel in that aircraft are assigned. Therefore, if crewmembers from Squadron A use an aircraft from Squadron B (without conducting a transfer of that aircraft to Squadron A), all hours and sorties logged by Squadron A crew are attributed to Squadron B for all budgeting, accounting, and SBTP purposes.

d. Flight Simulator Usage. All simulator flight events must be recorded in M-SHARP to enable higher headquarters to accurately track simulator usage

and the contribution to training readiness that flight simulators provide. Flight time logged in simulators is always attributed to the unit to which the personnel on the simulator event are assigned.

4. SBTP Responsibilities. The execution of the Marine Corps SBTP requires the following assignment of responsibilities.

a. DC AVN (APP-2)

(1) Annual Unit SBTP Forecast Submission. Consolidate all SBTP Forecasts electronically no earlier than 23 August and develop the Marine Aviation Sortie Based Training Plan Forecast for DC AVN.

(2) Monthly Unit SBTP Execution Reporting. Consolidate squadron execution reports by T/M/S electronically no earlier than the 6th working day of the following month and develop the Marine Aviation Sortie Based Training Plan Execution Update for DC AVN.

b. MARFORCOM, MARFORPAC, and MARFORES. Review annual SBTP Forecasts per paragraph 2.a and monthly SBTP Execution reports of participating subordinate squadrons and communicate any changes needed through the chain of command. Ensure any edits to annual forecasts are completed and forecasts submitted/resubmitted by 22 August. Ensure any discrepancies on monthly SBTP Execution reports are reconciled by the 5th working day of the month. MARFOR approval is assumed by COB 22 August for SBTP forecasts and by COB on the 5th working day of the month for SBTP Execution reports unless correspondence is provided to the contrary.

c. MAWs. Review annual SBTP Forecasts per paragraph 2.a and monthly SBTP Execution reports of participating subordinate squadrons and communicate any changes needed through the chain of command. Ensure any edits to annual forecasts are completed and forecasts submitted/resubmitted by 15 August. Ensure any discrepancies on monthly SBTP Execution reports are reconciled by the 5th working day of the month. MAW approval is assumed by COB 15 August for SBTP forecasts and by COB on the 5th working day of the month for SBTP Execution reports unless correspondence is provided to the contrary. Ensure thorough and accurate information is included in each squadrons' reports.

d. MCI-East, MCI-West, and Marine Corps Bases Japan. Review annual SBTP Forecasts per paragraph 2.a and monthly SBTP Execution reports of participating subordinate squadrons and communicate any changes needed through the chain of command. Ensure any edits to annual forecasts are completed and forecasts submitted/resubmitted by 15 August. Ensure any discrepancies on monthly SBTP Execution reports are reconciled by the 5th working day of the month. MCI/Marine Corps Bases Japan approval is assumed by COB 15 August for SBTP forecasts and by COB on the 5th working day of the month for SBTP Execution reports unless correspondence is provided to the contrary. Ensure thorough and accurate information is included in the squadrons' reports.

e. MAGs. Review annual SBTP Forecasts per paragraph 2.a and monthly SBTP Execution reports of participating subordinate squadrons and communicate any changes needed through the chain of command. Ensure any edits to annual forecasts are completed and forecasts submitted/resubmitted by 8 August. Ensure any discrepancies on monthly SBTP Execution reports are reconciled by the 5th working day of the month. MAG approval is assumed by COB 8 August for SBTP forecasts and by COB on the 5th working day of the month for SBTP Execution reports unless correspondence is provided to the contrary. Ensure thorough and accurate information is included in each the squadrons' reports.

f. Squadrons

(1) Annual Unit SBTP Forecast Submission. Develop and submit annual SBTP forecasts per paragraph 2.a by 1 August via M-SHARP. HMM/VMM squadrons should include the hours & sorties of reinforcing units/detachments (HMLA/HMH/VMA) in their SBTP forecast during scheduled MEU/MAGTF operations. Units joining or sending detachments to a composite HMM/VMM squadron should exclude associated hours/sorties from SBTP forecasts during that time. Ensure any edits to annual forecasts directed by senior commands are completed and forecasts resubmitted by the timelines defined above. Squadron approval of SBTP forecasts is indicated by submitting the forecast in M-SHARP.

(2) Monthly Unit SBTP Execution Reporting. Maintain the accuracy of squadron SBTP data in M-SHARP per paragraph 2.b and paragraph 5. Ensure any discrepancies on monthly SBTP Execution reports are reconciled by the 5th working day of the month. Squadron approval is assumed by COB on the 5th working day of the month for SBTP Execution reports unless correspondence is provided to the contrary. Monthly hours & sorties of reinforcing detachments (HMLA/HMH/VMA) assigned to the MEU will be captured via M-SHARP and credited to the HMM/VMM. The automated reporting resident in M-SHARP will eliminate the need for parent commands (HMLA/HMH/VMA) to track flight hours/sorties of detachments assigned to the MEU ACE.

5. Data Accuracy. M-SHARP users shall maintain the integrity of their M-SHARP data for budgeting and accounting purposes. All M-SHARP data used in the SBTP must be maintained at the highest level of accuracy. In order to provide senior commands with information about the accuracy of individual unit data, the health of each unit's M-SHARP program is measured and tracked using the 5 color-coded progression levels below. Each unit's implementation level is objectively assessed by M-SHARP Support Representatives for all levels except Level 1/Green which requires the unit commander's assessment. The current status of all units can be found at https://msharpsupport.com. Squadrons failing to reach Level 1/Green must continue to manually submit the Excel-based "Page 1" and "Page 2" reports via the chain of command.

a. Level 1/Green. Unit is maintaining the requirements for Level 2/Blue, and the Commander has assessed his unit's M-SHARP database accuracy as sufficient for automated reporting to higher headquarters. Commanders or a designated representative shall communicate their Level 1 assessment to TECOM ATB via M-SHARP Support Representatives. Units are required to maintain their M-SHARP program at Level 1/Green.

b. Level 2/Blue. Unit is maintaining the requirements for Level 3/Yellow, has baselined crew data, is logging all flights in M-SHARP, is transferring all flights to NALCOMIS, and is publishing all schedules using M-SHARP (except in cases where schedules are deemed classified) but the Commander has not assessed his unit's M-SHARP database accuracy as sufficient for automated reporting to higher headquarters.

c. Level 3/Yellow. Unit has met the minimum training requirements per NAVMC 35400.14 which is at least one operations representative (officer or enlisted) that has successfully completed the M-SHARP administrators course offered by M-SHARP support representatives. Units are expected to advance to Level 1/Green within three months of receiving training where on-site tech support is available.

d. Level 4/Red. Unit has not met or maintained the minimum training requirements per reference (o). Note that it is possible for a unit to regress from Level 1/Green to Level 4/Red due to turnover of operations personnel. This reflects the strong correlation (verified by more than a decade of supporting data drawn from both the SARA and M-SHARP programs) between adequately-trained personnel and the accuracy of a unit's training management system over time.

e. Level 5/Gray. Unit is not required to use M-SHARP. Level 5/Gray is for units or communities that have not yet been fielded with M-SHARP per the TECOM ATB fielding schedule and for units having received a waiver for M-SHARP usage. Waivers may be requested by message to TECOM ATB via the respective MAW. Units that deployed without M-SHARP are automatically granted a waiver for M-SHARP usage and SBTP deadlines until 60 days after returning from deployment.

6. Technical Support. M-SHARP technical support, training, and troubleshooting assistance are available to users at every level of the chain of command by contacting the M-SHARP Support Team. Contact info is posted on the M-SHARP User Support Site at https://msharpsupport.com/, which also contains the complete M-SHARP Software Users Manual.

Chapter 4

Active Component FHP Fiscal Comptroller Procedures

1. General. The following paragraphs describe the procedures to be used by the active component FHP Fiscal Comptroller in determining requirements for the FHP Program.

a. Funds for the Marine Tactical Aircraft (TACAIR), Fleet Air Training (FAT), and Fleet Air Support (FAS) FHP are provided by the Operation and Maintenance, Navy (O&M,N) appropriation, for the sole purpose of supporting Marine aviation Training and Requirements.

b. The Marine Forces Commanders provide projected out year flight hour requirements and possible funding shortfalls during the Program Objective Memorandum (POM) or Program Review (PR) process. Prior to the beginning of the Fiscal Year (FY), Type Commanders (TYCOMs) identify projected shortfalls to OPNAV N4/Financial Management Branch (FMB), providing execution data and projected cost increases. During the year of execution, MARFORs provide revised shortfall estimates and request additional funding as part of an annual mid-year budget review.

2. Activity Group and Sub-Activity Group (AGSAG) are provided the following funds (according to the following criteria):.

a. The FHP O&M,N funds are broken into Activity Group (AG) and Sub-Activity Group (SAG) and allocated to TYCOM LANT/PAC. The MARFOR receive Operating Target (OPTAR) grants for support of specific T&R operations.

(1) Activity Group/Sub Activity Group (AGSAG). A four-character alphanumeric code used in the Operations & Maintenance, Navy (O&M,N); Operations and Maintenance, Navy Reserve (O&M,NR); Military Personnel, Navy (MPN); and Reserve Personnel, Navy (RPN) appropriations used to tag resources by specific purpose. For example, the AGSAG "1C1C" indicates the "Combat Communications" AGSAG.

(2) AGSAG 1A1A - 1A - Air Operations. 1A - Mission and other Flight Operations, which includes Tactical Aircraft (TACAIR) operations and Fleet Air Support (FAS) operations.

(3) AGSAG 1A2A - 1A - Air Operations. 2A - Fleet Air Training (FAT) or Fleet Replacement Squadrons (FRS) train new pilots, refresher or transition pilots based upon specific Type/Model/Series (T/M/S) aircraft training syllabi. Aviators returning to flight status from administrative staffs or non-flying billets attend FRS modified course to refresh/qualify in their T/M/S.

b. A complete list of funding and authorized use can be found in NAVSO P-3013.

3. Operational Functional Category (OFC) can be divided into the following categories.

a. Both 1A1A and 1A2A are broken into Operational (or OPTAR) Functional Category (OFC) to provide specific use of funds (direct or indirect support) and the type of support the funding provides.

b. The following provides further details of the categories associated with the FHP.

(1) Direct Support. Funds are divided in two OFC, OFC-01 and OFC-50. Each OFC has specifically assigned fund codes which are two digit alphanumeric or numeric-alpha codes that identifies the purpose of the financial transaction and ties the transaction to the appropriate funding.

(a) OFC-01 - Organizational/Squadron Level of Funding. Identified by fund codes 7B for aviation fuels and 7F for flight equipment and administrative supplies in direct support of flight operations and aircraft (A/C) maintenance.

(b) OFC-50 - Intermediate Maintenance Activity (IMA)/Organizational Maintenance Activity (OMA) Level of Funding. Funds support Marine Aircraft Group (MAG), Naval Air Station Aircraft Intermediate Maintenance Department (AIMD), and CV/L-class ships maintenance departments. Identified by fund code 9S for Aviation Depot Level Repairable (AVDLR) repairable components and sub-assemblies, and 7L for aviation fleet maintenance (AFM) non-repairable or consumable parts, bit and piece parts, and contract services.

(2) Indirect Support: Flying Hour Other (FO) funding. Requirements support operations and maintenance of the aircraft and/or essential support of the aviation training, readiness, and maintenance mission.

(a) OFC-09. Individual Material Readiness Lists (IMRL) and Table of Basic Allowance (TBA).

(b) OFC-10. Other Aircraft Services (OAS) to include: Mobile Facilities (MF-vans), Weather (WX), MACS/EAF, Logistics Contractor Support, repair of TBA allowance items.

(c) OFC-21. Temporary Additional Duty (TAD).

(d) OFC-23. Transportation of Things (TOT).

(3) Aviation Training Systems/Simulators (ATS/SIMS). The FHP provides funding to the TYCOMs for ATS/SIMS programs operations. The Navy and Marine Corps simulators are located at multiple training sites in CONUS and OCONUS. NAVAIR Orlando Training Systems Division has the requirement to provide Fielded Training Systems Support (FTSS). TYCOMs budget and provide funds for services to include: Contractor Operation and Maintenance Services (COMS), Contractor Instruction (CI), training device relocations, technical data verification, modifications to training devices and equipment, student management, and other support (e.g., access control, janitorial service, In-Service Engineering Office (ISEO) support, instructional systems development, spare and repair parts provisioning, etc.).

4. Funds Allocation. Funds allocated to the MARFORs are distributed to the MAW for further distribution to the MAG. The MAG Fiscal Officer controls TAD (TACAIR/FRS) funds and, in conjunction with the MALS aviation supply officer, provides Operating Targets (OPTAR) for fuel (7B), flight equipment (7F), aviation maintenance (7L), and AVDLR (9S) to the individual flying squadrons in accordance with reference (i). The MALS Supply Accounting Division (SAD) controls and maintains accounting files and records of the direct and indirect funds (excluding TAD).

5. OFC-01 Budget OPTAR Report (BOR). The OFC-01 Budget OPTAR Report is to be used by all flying squadrons to report: execution of hours and obligations of funds in the following manner. This report is exempt from reports control per reference (m), part IV, paragraph 7.q. The OFC-01 BOR (flying squadrons only) reports execution of the hours and obligations of funds for each T/M/S aircraft assigned. A flying squadron may have multiple OFC-01 BORs, due to multiple Unit Identification Codes (UICs) assigned to a squadron for deployable detachments. The UIC distinguishes the detachment from the main body of the squadron, which allows for individual detachment obligations to be tracked. The BOR submission is mandatory for 18 months, (12 months during the current FY, and 6 months after the closeout of the FY to track financial corrections and/or changes of obligations and expenditure data from the Defense Financial Accounting System (DFAS). A BOR is submitted for an additional 6 months if the Gross Adjusted Obligation (GAO) changes.

a. OFC-01 BOR is the squadron commander's official financial record of obligations and the execution of flight hours for assigned aircraft reported to MAW, MARFOR, and TYCOM. The fuel charges, (identified as 7B fund code), and flight equipment charges (identified as 7F fund code) are summarized on the OFC-01 BOR by T/M/S. OFC-01 7F fund code obligations are funded from OP-20, OFC-50, Aviation Fleet Maintenance (AFM-7L).

b. Weekly transmittals summaries of flight equipment charges (7F) and monthly detailed summary fuel reports of aviation fuel (7B) combine to create a Budget Optar Report (BOR) that provides the TYCOM with account balances and execution information. The TYCOM summarizes all financial accounting records and provides obligations to the Defense Finance and Accounting Service.

c. The squadron commanding officer is responsible for timely and accurate reporting of flying hours for the BOR. The hours listed on the BOR will match the Naval Aviation Flight Record (NAVFLIR) hours recorded in the squadron's NAVFLIR/Naval Aviation Logistics Command Management Information System (NALCOMIS) database. Reconciliation of recorded flight hours between NAVFLIR/NALCOMIS and the BOR will be done daily. The squadron commanding officer must ensure correct and timely information is provided to the MAG in accordance with annual Commander Naval Air Forces (CNAF) guidance.

6. Authorized OFC-01 Charges. OFC-01 funds are for direct support of squadron aircraft operations, fuels (JP/AVGASCOM) fund code 7B, and fund code 7F, consisting of consumable operational supplies (administrative supplies/ServMart: pens, paper, notebooks) and aircrew flight equipment purchases in direct support of flight operations and A/C maintenance.

a. Administrative supplies shall be limited to aircraft maintenance divisions and supporting S-3 operations. Administrative supplies for other than flight related support (i.e., S-1 Personnel) is funded by O&M, MC funds. The squadron commander is responsible for the proper obligation and reporting of funds.

b. There are no discretionary funds within the OFC-01 funding.

c. The following is a list of NAVSO P-3013 authorized OFC-01 charges:

(1) Aviation fuels (JP-4, JP-5, AVGAS, and Commercial fuels) consumed in flight operations.

(2) Pilot/flight crew clothing and operational equipment. Initial and replacement issue of authorized items listed in NAVAIR Allowance List 0035QH series (except items used by maintenance personnel).

(3) Consumable office supplies (aircraft maintenance division and flight operations related S-3 operations only).

(4) Aerial film, recording tape, chart paper used in flight.

(5) Flight deck and safety shoes, used by squadron personnel in the maintenance, launch, and recovery of aircraft.

NOTE: Safety/flight deck shoes used in maintenance shops and with Aviation Maintenance Support Equipment (AMSE) are not chargeable to flight operations, but rather to AFM.

(6) Unit identification marks. Initial issue to newly reported squadron personnel.

(7) Oxygen, liquid and breathing, consumed during flight by both the pilot and aircraft systems.

(8) Shock lubricants and bearing grease. Applicable to flight operations.

(9) Nitrogen. Consumed in flight.

(10) Forms (Cognizance Symbol 1I) and publications. 1I forms, publications, and the reproduction thereof (other than initial outfitting and newly commissioned squadrons or forms and publications used in direct support of maintenance).

(11) Publications that are used to impart technical and professional knowledge (not provided by higher headquarters to officers and enlisted personnel of the command).

(12) Squadron plaques (for commanding and executive officer's offices only).

(13) Special purpose identifying clothing utilized by squadron personnel in the readiness, launch, and recovery of aircraft. Wet suits.

(14) New items published in the aviation safety and survival bulletins for use by pilot or crewmember or other approved Aviation Life Support Systems (ALSS).

(15) Incentive awards, at the discretion of the commanding officer or as approved by TYCOM.

7. Unauthorized OFC-01 Charges

a. Administrative supplies used in support of Morale and Welfare or Marine Corps personnel administrative actions to include personnel records, official correspondence, and command/commanding officer's official support of activities outside of the scope of aviation training and operational readiness requirements.

b. Food or beverages - except for survival rations for aircrew.

c. Commercial services or supplies not related to aviation training and readiness requirements.

d. Computers or peripheral equipment, hardware or software.

e. Gifts or presentations, to include aircraft models/replicas, flight clothing, or other Government procured or issued items.

f. Publications of a recreational nature that contribute to the morale of the command and are not flight operations requirements. Publications that contribute to morale should be provided from the welfare and recreational funds at the discretion of the command.

8. OFC-50 BOR. Monthly summary report of direct maintenance costs for consumables parts and repairable spares are prepared and submitted by the MALS aviation supply officer to the TYCOM, MARFOR, MAW, and MAG. OFC-50 BOR provides the monthly and cumulative obligations for the direct support of aircraft by Type Equipment Code (TEC).

9. Authorized OFC-50 Charges. Direct support of aircraft operations for replacement parts and materials used on aircraft maintenance. The following is a NAVSO P-3013 list of authorized OFC-50 charges.

a. Fund Code 7L -- Consumables

(1) Paints, wiping rags, towel service, cleaning agents and cutting compounds used in preventive maintenance and corrosion control of aircraft and ground support equipment.

(2) Consumable repair parts and miscellaneous material. NSA material used in direct maintenance of aircraft, drones, targets, and component repair or related Ground Support Equipment (GSE).

(3) Pre-expended Bins (PEB), consumable maintenance material meeting requirements for use in maintenance of aircraft, aviation components, GSE, etc.

(4) Aviation Fuels and Lubricants. Aviation fuel and lubricants used in test and check of aircraft engines during engine build up, change or during maintenance (intermediate level only). Petroleum, Oil & Lubricants (POL) products, i.e. oil, fuel additives, or other petroleum products, consumed in flight.

(5) Allowance List Items NAVAIR 00-35-QH. Only items used strictly for maintenance: explosive handlers, face shields, industrial gloves, welders' goggles, and industrial non-prescription safety glasses.

(6) Fuels used in related GSE.

(7) Test bench equipment. Replacement of components used in test bench repair and rotatable pools.

(8) Repairable NSA material having a Material Control code of E, H, G, Q, or X (Non-AVDLR). NSA repairable material (Non-AVDLR) used in maintenance of aircraft.

(9) Maintenance or replacement of aircraft loose equipment listed in the aircraft inventory record.

(10) Hand tools. Consumable hand tools used in the readiness and maintenance of aircraft, maintenance and repair of components and related support equipment.

(11) Safety/Flight Deck Shoes. Used in maintenance shops.

(12) Repair and maintenance of flight clothing and aircrew equipment.

(13) Decals; restricted to decals used on aircraft.

(14) Replacement of Consumable Special Tools and Individual Material Readiness List (IMRL) allowance list items. Cost incurred for IMRL repair.

(15) Packing, Preparation and Preservation. Items consumed in interim packaging/preservation of AFM repairables.

(16) Forms (COG 1I) and Publications. Maintenance Action Form (MAF), bags, equipment condition tags, publications etc., used in support of direct maintenance of aviation components or aircraft.

(17) Special Clothing. Authorized special purpose clothing for dirty work while performing maintenance of aircraft.

(18) Replacements of General Purpose Electronic Test Equipment (GPETE) allowance items, which are missing or unserviceable (COG 7Z).

(19) Civilian field teams (CFT), contract labor support (CLS), or any non-military maintenance contracts charged to direct support of aviation fleet maintenance requires MARFOR approval prior to initiation of contract. Requirements for direct support of aircraft and/or support equipment will be submitted to the MARFOR documenting:

(a) Specific tasking or "statement of work" identifying total requirements.

(b) Longevity of the contract based on calendar dates.

(c) Daily or weekly units of work or production as outlined within the contract agreement.

(d) Recurring weekly, monthly, or annual contracts are not authorized without express approval of MARFOR.

(e) MARFOR will identify and submit all approved CFT/CLS and other maintenance contracts as identified in chapter 6.

(f) MARFOR Assistant Chief of Staff, Aviation Logistics Division (ALD) will conduct annual reviews for requirements and validity of contracts prior to renewal.

b. Fund Code 9S. -- Aviation Depot Level Repairable (AVDLR) or NSA Aviation Depot Level Repairable spare parts.

(1) High cost assemblies repairable at the Intermediate Maintenance Activity (IMA) or MALS maintenance department.

(2) Item has a Standard Unit Price (SUP) and a Net Unit Price (NUP).

(3) SUP is the cost per unit as ordered from the supply system without a corresponding carcass turn-in or exchange.

(4) NUP is a reduced unit price that takes into account the return of repairable carcasses that have been or will be returned to the supply system for repair. The requisition is charged the NUP when the carcass is available for turn-in to the supply system.

(5) In the event the carcass is not returned to the supply system, the SUP is charged. There are designated "grace periods" for CONUS/OCONUS geographical sites to allow for removal, packaging, and return shipment of carcasses to the Naval Supply System Designated Overhaul Point (DOP). However, failure to return the carcass to the supply system within the specified time period results in additional charges to the OFC-50 OPTAR. The additional carcass charges, SUP vice NUP, are significant and impacts directly on the Cost Per Hour (CPH) of the aircraft.

10. Unauthorized OFC-50 Charges

a. Any charges of materials, parts, or supplies not directly related to the maintenance or support of aircraft, aviation ground support equipment, or aviation peculiar support equipment.

b. Buildings and grounds upkeep.

c. Additional items such as:

(1) Shipment of aviation parts Ready for Issue (RFI) or Non-RFI, materials, or any organic supplies and equipment. Transportation charges for Government or commercial shipments or shipping services to include Fedex, UPS, and other CONUS/OCONUS shipments.

(2) Office equipment leases or purchases, to include copiers, computers, and other labor saving administrative equipment.

(3) Non-aviation related services or support agreements.

(4) Facilities, building and grounds, and runway/ramp repairs or renovation.

(5) Furniture, household-cleaning supplies, material handling equipment or services.

(6) Transportation or vehicle rental agreements other than aircraft handling/towing equipment. (See Transportation of Things charges.)

(7) Mailing or correspondence materials and services.

(8) Civilian labor, software, or technical services requirements not approved by the TYCOM.

(9) Food and beverages.

11. CPH. The CPH for a specific aircraft is computed by adding all related direct support requirements from the OFC-01 BOR, and the OFC-50 BOR total obligations, and fair share of miscellaneous charges. Fair share is a percentage of miscellaneous charges based on the number of aircraft divided by the number of executed hours over the same time period. The monthly CPH for each T/M/S must be derived from three sources and combined for the Total CPH:

a. The OFC-01 BOR charges are calculated as follows:

(1) OFC-01 Fuel (7B) obligations for each T/M/S divided by executed hours = Fuel CPH.

Example: F/A-18C ($8,805,126 ÷ 8,304.3 HOURS) = $1,060 Fuel CPH

(2) OFC-01 Flt Equipment (7F) obligations for each T/M/S divided by executed hours = Flight Equipment CPH.

Example: F/A-18C ($830,430 ÷ 8,304.3 HOURS) = $100

b. The OFC-50 BOR for obligations at the MAG/IMA level of maintenance support. The CPH for AFM (7L) and AVDLR (9S) equation is as follows:

Obligations by T/M/S divided by hours for all squadrons = CPH (less TYCOM withholds).

(1) Example: Obligations for F/A-18C ÷ Hours for F/A-18C = CPH

OR

(2) AFM (7L)	(14,050,589 ÷ 8,304.3)	= $1,691 CPH
AVDLR (9S)	(22,027,553 ÷ 8,304.3)	= $2,652 CPH

c. TYCOM withholds, funding documents, fund codes 7B, 7F, 7L, and 9S, for services, parts, and contracts in support of specific T/M/S generated by squadron/MAG requirements for external support of the squadron/aircraft are added to the I-Level CPH by the TYCOM. Therefore, it is essential that all charges be tracked for accuracy and validity against each T/M/S of aircraft.

12. Indirect Support. Commonly referred to as Flying Hour Other (FO) accounts require the same reporting as direct support OFCs. FO costs are not considered in the CPH calculations. However, the impact of under-funding FO accounts impacts significantly on the overall FHP.

a. Authorized IMRL/TBA OFC-09 Charges:

(1) Individual Material Readiness Lists (IMRL) OFC-09 - NSA Material Individual Material Readiness List (IMRL) initial issue.

(2) Marine Table of Basic Allowance (TBA), OFC-09 - Approved and authorized allowance items initial issue.

b. Unauthorized IMRL/TBA OFC-09 Charges:

(1) Purchase/requisition of non-IMRL/TBA allowance list items.

(2) Services or repairs of IMRL/TBA items.

(3) Contract and contract support.

c. Authorized Other Aircraft Services (OAS) OFC-10 Charges:

(1) Mobile Maintenance Facilities (MMF-vans) - repairs, preventative maintenance and replacements of parts for the vans, air conditioning, and generator support.

(2) External Training Loads, Targets, Tow Banners, and Dunnage.

(3) Weather (WX) - Authorized maintenance and repair parts, supplies, and services related to aviation support.

(4) MACS - Authorized maintenance and repair parts, supplies, and services related to aviation support.

(5) Logistics/Technical Contractor Support - Authorized technical assistance and training support contractors approved by MARFOR. Contractors for technical, logistics or maintenance support charged to indirect support requires MARFOR approval prior to initiation of the contract. Requirements will be submitted to the MARFOR documenting:

(a) Specific tasking or "statement of work" identifying total requirements.

(b) Longevity of the contract based on calendar dates.

(c) Daily or weekly units of work or production as outlined within the contract agreement.

(d) Recurring weekly, monthly, or annual contracts are not authorized without express approval of MARFOR.

(e) MARFOR will identify and submit all approved maintenance contracts as identified in chapter 6.

(f) MARFOR Assistant Chief of Staff, Aviation Logistics Division (ALD) will conduct annual reviews for requirements and validity of contracts prior to renewal.

(6) Repair of TBA allowance end items - Authorized maintenance and repair parts, supplies, and services related to aviation support.

(7) Range fees and airfield operations charges in support of aviation training and readiness missions.

d. Unauthorized OAS OFC-10 Charges. Obligations that are not specifically for the support of the aircraft readiness or maintenance requirements as listed above. Transportation or shipping services for any purpose.

e. Authorized TAD OFC-21 Charges

(1) Temporary Additional Duty (TAD) travel and per diem charges for aviation support or related requirements for military and Government employees (GS).

(2) School quotas for aviation squadron or unit training.

(3) Squadron or unit training for aviation related readiness.

(4) Factory maintenance training.

(5) TRANS-PACIFIC or TRANS-ATLANTIC for aircrew and maintenance support personnel regardless of the change of custody of the aircraft.

(6) Crew rotation (CONUS)-Rotation of crews within squadron.

(7) Travel and per diem for military and Government employees to conduct site visits and inspections of aviation logistics and maintenance operations ashore or afloat.

(8) Site surveys for air operations and deployments. Attendance at aviation related planning or technical conferences.

(9) Deployment (within/outside CONUS).

(10) Emergency quarters while on extended flight.

f. Unauthorized TAD OFC-21 Charges

(1) Funding of travel for military spouses and/or family members, civilian contractors, or non-Government employees are not authorized.

(2) Funding military personnel or Government employees traveling for non-aviation related support to include conferences, seminars, and site visits.

(3) Funding travel of emergency leave or morale leave.

(4) Funding travel for personal business or official business not related to the support of aircraft or Marine Aviation.

g. Authorized Transportation of Things (TOT) OFC-23 Charges

(1) TOT, OFC-23, includes costs of transportation of ready for issue (RFI) aviation parts, materials, and related things chargeable to aviation operating force funds. Trans-shipment of supply system parts via Government shipping channels to include Air Mobility Command (AMC), Military Sealift Command (MSC), or contract commercial sources (Fedex/UPS/DHL) as appropriate to meet delivery date requirements.

(2) Costs are limited to transportation of organic (squadron owned) aviation material to include support equipment and maintenance tools in support of aviation operations and training.

(3) The TYCOM establishes and funds Transportation Account Codes (TAC) for transportation and movement of TOT in support of specific operations and exercises. The TAC permits units to cite the appropriate TAC for billing of AMC, MSC, or commercial carriers obligations. MARFOR TOT funds are withheld by the TYCOM to cover individual unit TAC obligations.

(4) Packaging and preservation materials and supplies used in processing authorized shipments of aviation parts and support equipment.

(5) Lease/rental agreements for forklifts, flight line delivery vehicles and other materials handling equipment.

(6) Transportation or vehicle lease/rental agreements other than aircraft handling/towing equipment used to support flight line operations, delivery and movement of aircraft parts and supplies.

h. Unauthorized TOT OFC-23 Charges

(1) Shipment of Non-RFI components to depot level or commercial repair sites (CONUS or OCONUS) or to other Naval Supply System designated activities.

(2) Transportation, packaging, or storage of personal effects, household goods, or privately owned vehicles. These charges should be referred to the appropriate Transportation Management Office (TMO) for proper entitlements and/or disposition.

(3) Commercial shipping agreement contracts or services (Fedex, UPS, or other commercial shippers) not specifically approved by MARFORs ALD and the TYCOM.

13. Contingency Operations. The policies and procedures for the funding of contingency operations are provided in the following paragraphs.

a. A military operation that is either designated by the Secretary of Defense as a contingency operation or becomes a contingency operation as a matter of law. Contingency operations hours are conducted in support of contingency operations as delineated by the TYCOM directions. The following definitions apply.

(1) Contingency flight hours: hours flown on any flight in direct support of a contingency operation. All flights that originate in country, regardless of mission, are considered contingency flights. Flights that originate outside the contingency operation area (i.e. from sea or an allied country) only count as contingency flights if they are in direct support of the operation. Contingency flight hours are reported monthly by the squadron in the Budget OPTAR report.

(2) Incremental contingency flight hours: contingency flight hours flown above the baseline flight hour allotment. All contingency hours flown by activated reserve squadrons are incremental contingency hours. All contingency hours flown by AC squadrons that are above the training hours planned in the squadron's SBTP are incremental contingency hours. Incremental contingency hours are reported monthly by the MARFOR in the Flying Hour Cost Report.

b. The MARFORs are responsible for the accurate and timely reporting of contingency hours and financial obligations. Assistant Chief of Staff, G-3/ Comptroller/G-8 will document, record, report, and maintain files for contingency hours and obligated funding for contingency operation(s). Execution data of contingency hours will reflect total hours and total costs for each contingency operation and will be maintained as separate entities from baseline hours and cost. The execution data will be maintained by contingency location (for multiple sites and/or deployments), aircraft T/M/S, and funding category obligations (fuel/consumables/contracts/AVDLR/FO). FHP CPH costs and Flying Hours Other (FO) costs will reflect ongoing operations, identifying organic and activated reserve squadrons' costs as separate entities for financial reporting purposes.

(1) MARFORs will ensure costs for each T/M/S are inclusive of active duty and activated reserve squadrons funded directly or indirectly by funding documents or reimbursable funds.

(2) Organic squadron contingency hours will be identified and reflected in total hours and costs by the reporting squadron as directed by MARFOR/TYCOM via the BOR(s) monthly for direct and indirect support.

(3) Contingency hours, for organic squadrons and activated reserve squadrons, will be reconciled monthly between the active MAW, 4th MAW, and the MARFOR (G-3 for executed hours and Comptroller/G-8 for obligated costs).

(4) The MARFOR Comptroller/G-8 will reconcile with the TYCOM for contingency hours and supporting financial obligation reports. Reports will maintain continuity and accuracy for financial obligations.

c. Supplemental Funds. Incremental contingency hours and indirect costs associated with contingency operations are funded by supplemental funds to relieve the TYCOM of having to fund costs in excess of OP-20 budgeted hours. Supplemental funds are requested by the TYCOM based on an "approved" contingency operation. TYCOMs must request supplemental from FMB.

d. Over-executed flight hours not flown in support of a contingency operation(s) will not be funded. Additionally, if the sum of training hours and those executed in support of contingencies does not exceed SBTP programmed hours it is not considered for supplemental funds. These costs are the internal responsibility of the MARFORs or TYCOM.

e. T&R flight hours lost (under-executed or not executed) while supporting contingency operations shall not be flown in addition to programmed T&R hours for subsequent months of execution or flown in excess scheduled hours in other squadron(s) with same/similar aircraft or missions, unless mission requirements dictate.

f. Movement of under-executed flight hours to satisfy T&R requirements for a squadron's lost hours should be done to create normal utilization of aircraft and to complete aircrew T&R requirements. Over-flying to meet total execution of MAW SBTP is prohibited. Each hour should reflect a T&R requirement and a corresponding contingency hours offsets.

14. Activated Reserve Unit Flight Hour Funding Procedures

a. Upon activation (as defined in chapter 6 and Joint Publication 1-02), all the RC unit flight hour costs will be funded entirely via O&M,N by the gaining AC MARFOR, regardless of where the activated RC unit is operating. Upon deactivation, the RC unit's FHP funding will revert back to O&M,NR funding through MARFORRES. It is incumbent upon the activated RC unit to report their unexecuted flight hour funds to 4th MAW for submission to MARFORRES.

b. MARFORRES/4th MAW will report all activated unit's remaining unexecuted Flight Hour funds to Commander Naval Reserve Forces Command for submission to OPNAV N-82 Financial Management Branch (FMB) for reprogramming. FMB will submit the reprogramming initiative to OSD with CMC advocacy. The intent is to source the gaining AC MARFOR budget shortfall with the unexecuted reserve flight hour funds.

c. Activated reserve squadron hours for both contingency operations and CONUS training will be logged by aircrew, identified by T/M/S, and reported monthly to the TYCOM using their activated ORG code (listed below) as coordinated by the MARFOR and MARFORRES/4th MAW. The MARFOR providing the financial resources for the activated reserve squadron(s) will report the executed hours and costs.

Reserve Unit Activated Organizational Codes

Reserve Component Unit	ORG Code	Activated ORG Code
HMM-764	SL3	SM4
HMM-774	SN1	SN3
HMLA-773	SE4	SQ1
HMH-772	SU5	SU9
VMFA-112	SD2	SD7
VMFA-134	SL1	SM4
VMFA-142	SJ1	SJ3
VMGR-234	SA3	SA6, SA7
VMGR-452	SM1	SM2

15. Frequently Used Financial Acronyms. The table of frequently used acronyms in the FHP Program is listed below in order to enable commanders to have an easily accessible source of information.

AFM	Aviation Fleet Maintenance
AG	Activity Group
AIMD	Aviation Intermediate Maintenance Department
ASD	Aviation Supply Department
ASHE	Aviation Support Handling Equipment
AVDLR	Aviation Depot Level Repairable
BISOG	Blue (Navy $$) in Support of Green (USMC $$)
BOR	Budget Operating Report
CLS	Contractor Logistics Support
CNAF	Commander, Naval Air Forces (see CNAP)
CNAL	Commander, Naval Air Forces, Atlantic
CNAP	Commander, Naval Air Forces, Pacific
DFAS	Defense Financial and Accounting Services
FAS	Fleet Air Support
FAT	Fleet Air Training (see FRS)
FHP	Flying Hour Program
FHPS	Flying Hour Projection System
FRS	Fleet Replacement Squadron (see FAT)
GSE	Ground Support Equipment
IMA	Intermediate Maintenance Activity
IMRL	Individual Material Requirements List
MACP	Marine Aviation Campaign Plan
MALS	Marine Aviation Logistics Squadron
MARFOR(COM/PAC/RES)	Commander, U.S. Marine Forces (Command/Pacific/RESERVE)
MF vans	Mobile Facilities vans
MFC/MFP	MARFORCOM/MARFORPAC
OAS	Other Aircraft Services
OFC	Operational Functional Category
OMN	Operational and Maintenance, Navy
OP-20	Flying Hour Program DON Budget Exhibit
PMAA	Primary Mission Aircraft Authorization
POM	Program Objective Memorandum (even year)
PPBE	Planning, Programming, Budgeting, Execution
PR	Program Review (odd year)
SAD	Aviation Supply Accounting Division

SAG	Sub Activity Group
TACAIR	Tactical Aircraft
TAD	Temporary Additional Duty
TBA	Table of Basic Allowance
TECOM	Training and Education Command
TL	Transmittal
TMS	Type Model Series of Aircraft
TOT	Transportation of Things
TYCOM	Type Commander

Chapter 5

Reserve Component FHP Fiscal Comptroller Procedures

1. General

a. Funds for the Marine Aviation Reserve Flying Hour Program (FHP) are provided by the Operations and Maintenance, Navy Reserve (O&M,NR) appropriation, for the sole purpose of supporting Reserve Marine Aviation Training and Readiness requirements.

b. 4th MAW G-3 provides out year estimated flight hours and identifies budget shortfalls during the Program Objective Memorandum (POM) or Program Review (PR) process. Commander Naval Reserve Forces Command (CNRFC) N-8 addresses shortfalls to OPNAV N4/FMB as required providing execution data and projected cost increases. In the year of execution, during the CNRFC N-8's mid-year budget review process, 4th MAW provides revised shortfall estimates and requests additional funding as required.

2. Activity Group and Sub-Activity Group (AGSAG)

a. The FHP, O&M,NR funds are broken into activity group (AG) and sub-activity Group (SAG), and allocated to the CNRFC N-8. Site comptrollers receive operating target (OPTAR) grants, with the guidance from 4th MAW Aviation Logistics Division, for support of specific training and readiness (T&R) operations.

b. AGSAG is a four-character alphanumeric code used in the O&M,NR appropriation used to tag resources by specific purpose. For example, the AGSAG "1A1A" indicates the "Flight Hour Funding" AGSAG.

c. A complete list of funding and authorized use can be found in reference (a).

3. Reserve Funding Categories

a. The Reserve funding categories contain both direct funding and indirect funding. The following provides more detail on the funding categories associated with the Reserve FHP:

(1) Direct Support. Funds are divided in four flight-funding categories: fuel, organizational maintenance activity (OMA), intermediate maintenance activity (IMA) and Aviation Depot Level Repairables (AVDLR).

(a) Fuel. Organizational/Squadron level of funding. This category of funding is for fuel, flight equipment and administrative supplies (Serv-Mart).

(b) OMA, IMA, and AVDLR funding. Funds support Reserve Marine squadrons, Reserve Naval Air Station Aircraft Intermediate Maintenance Department (AIMD) as well as Aviation Depot Level Repairable (AVDLR) repairable components and sub-assemblies, Aviation Fleet Maintenance OMA/IMA non-repairable or consumable parts, bit and piece parts, and contract services.

(2) Indirect Support. Flying hour other (FO) funding supports operations and maintenance of the aircraft and/or essential support of aviation training, readiness, and maintenance mission. Categories are:

(a) Individual Material Readiness Lists (IMRL) and Table of Basic Allowance (TBA).

(b) Other Aircraft Services (OAS), to include mobile facilities (MF-vans), Weather (WX), Marine Corps Air Station (MCAS)/Expeditionary Air Field (EAF), logistics contractor support, repair of TBA allowance items.

(c) Temporary Additional Duty (TAD).

(d) Transportation of Things (TOT).

(3) Aviation Training Systems/Simulators (ATS/SIMS). The FHP provides funding to the CNRFC N-8 for ATS/SIMS programs operations. The Navy and Marine Corps Reserves simulators are located at multiple training sites in CONUS. NAVAIR Orlando Training Systems Division has the requirement to provide Fielded Training Systems Support (FTSS) Services. CNRFC N-8 budgets and provide funds for services to include: contractor operation and maintenance services (COMS), contractor instruction (CI), training device relocations, technical data verification, modifications to training devices and equipment, student management, and other support (e.g., access control, janitorial service, In-Service Engineering Office (ISEO) support, instructional systems development, spare and repair parts provisioning, etc).

4. Funds Allocation. Funds allocated to the Marine Reserves are distributed to the site comptrollers for further distribution to the Marine Reserve Squadrons. The site comptrollers provide OPTAR for fuel, OMA, IMA and AVDLR to the individual flying squadrons. Funding received from the site comptroller is entered into Fund Administration and Standardized Data Automation (FAST DATA), which produce the OPTARs for each category. These OPTARs are established to ensure funding is available before a requirement is released into the system. The aviation supply officer controls TAD funds for the squadron(s) at that site.

5. Flight Hour Cost Report (FHCR). The FHCR (flying squadrons only) reports execution of the hours and cumulative obligations for the direct support of aircraft by Type Equipment Code (TEC). Individual detachment(s) obligations will be tracked and reported separately on the FHCR. Site comptrollers are required to submit the monthly FHCR to CNRFC N-8 within the first 10 working days of the month (by the 15th). This report is exempt from reports control per reference (m), part IV, paragraph 7.q.

a. The FHCR is the squadron commander's official financial record of obligations and the execution of flight hours for assigned aircraft reported to 4th MAW and CNRFC N-8. The fuel charges and flight equipment charges are summarized on the FHCR by T/M/S.

b. The squadron's commanding officer (S-3) is responsible for timely and accurate reporting of flying hours for the FHCR. The hours listed on the FHCR will match the Naval Aviation Flight Record (NAVFLIR) hours recorded in the squadron's NAVFLIR/Naval Aviation Logistics Management Information System (NALCOMIS) database. Reconciliation of recorded flight hours between NAVFLIR/NALCOMIS and the FHCR will be conducted on a daily basis. Corrective action shall be taken prior to monthly submission of the FHCR and NAVFLIR reports.

6. Authorized Fuel Charges. Fuel funds are for direct support of squadron aircraft operations, fuels jet petroleum (JP)/aviation gas commercial (AVGASCOM), consumable operational supplies (administrative supplies/ServMart - pens, paper, notebooks) and pilots and aircrew flight equipment purchases.

a. Administrative supplies shall be limited to aircraft maintenance divisions and supporting flight operations. Administrative supplies for other than flight related support (i.e., S-1 Personnel) are funded by O&M,MCR funds. The squadron commander is responsible for the proper obligation and reporting of funds.

b. There are no discretionary funds within the fuel funding category.

c. The following is a list of NAVSO P-3013 authorized fuel charges:

(1) Aviation fuels (JP-4, JP-5, AVGAS, and commercial fuels), consumed in flight operations.

(2) Aircrew clothing and operational equipment. Includes initial and replacement issue of authorized items listed in NAVAIR Allowance List 0035QH series (except items used by maintenance personnel).

(3) Consumable office supplies (aircraft maintenance division and related S-3 operations only).

(4) Aerial film, recording tape, chart paper used in flight.

(5) Flight deck and safety shoes used by squadron personnel in the maintenance, and launch and recovery of aircraft. Safety/flight deck shoes used in maintenance shops and with Aviation Maintenance Support Equipment (AMSE) are not chargeable to flight operations, but rather to aviation fleet maintenance.

(6) Unit Identification Marks. Initial issue to newly reported squadron personnel.

(7) Oxygen, liquid and breathing, consumed during flight by both the pilot and aircraft systems.

(8) Shock lubricants and bearing grease. Applicable to flight operations.

(9) Nitrogen consumed in flight.

(10) Forms, publications, and the reproduction thereof (other than initial outfitting of newly commissioned squadrons, or forms and publications used in direct support of maintenance).

(11) Publications used to impart technical and professional knowledge (not provided by higher headquarters to officers and enlisted personnel of the command).

(12) Squadron plaques for units only; not for personal awards, except for commanding and executive officers' offices.

(13) Special purpose identifying clothing utilized by squadron personnel in the maintenance, launch, and recovery of aircraft and wet suits.

(14) New items published in the aviation safety and survival bulletins for use by pilot or crewmember or approved Aviation Life Support Systems (ALSS).

(15) Incentive awards at the discretion of the commanding officer, or as approved by TYCOM.

7. Unauthorized Charges

a. Administrative supplies used in support of morale and welfare or Marine Corps personnel administrative actions to include personnel records, official correspondence, and command/commanding officer's official support of activities outside of the scope of aviation training and operational readiness requirements.

b. Food or beverages; except for survival rations for pilot/aircrew.

c. Commercial services or supplies not related to aviation T&R requirements.

d. Computers, peripheral equipment, and software.

e. Gifts or presentations, to include aircraft models/replicas, flight clothing, or other Government procured or issued items.

f. Publications of a recreational nature that contribute to the morale of the command that are not flight operations requirements. Publications that contribute to morale should be provided from the welfare and recreational funds at the discretion of the command.

8. Authorized OMA, IMA and AVDLR Charges. Direct support of aircraft operations for replacement parts and materials used on aircraft maintenance. The following is a list of authorized charges in accordance with reference (a):

a. OMA and IMA Consumables

(1) Paints, wiping rags, towel service, cleaning agents, and cutting compounds used in preventive maintenance and corrosion control of aircraft and ground support equipment.

(2) Consumable repair parts and miscellaneous material. Naval Support Activity (NSA) material used in direct maintenance of aircraft, drones, targets, and component repair or related Ground Support Equipment (GSE).

(3) Pre-expended Bins (PEB), consumable maintenance material meeting requirements of use in maintenance of aircraft, aviation components, GSE, etc.

(4) Aviation fuel and lubricants used in the testing of aircraft engines during engine build up, change or during maintenance (intermediate level only). Petroleum, Oil & Lubricants (POL) products, i.e., oil, fuel additives, or other petroleum products, consumed in flight.

(5) Allowance list items; only items used strictly for maintenance: explosive handlers, face shields, industrial gloves, welders' goggles, and industrial non-prescription safety glasses.

(6) Fuels used in related GSE.

(7) Test Bench Equipment. Replacement of components used in test bench repair and rotatable pools.

(8) Repairable NSA material having a material control code of E, H, G, Q, or X (Non-AVDLR). NSA repairable material (Non-AVDLR) used in maintenance of aircraft.

(9) Maintenance or replacement of aircraft loose equipment listed in the aircraft inventory record.

(10) Consumable hand tools used in the readiness and maintenance of aircraft, maintenance and repair of components and related support equipment.

(11) Safety/flight deck shoes used in maintenance shops.

(12) Repair and maintenance of flight clothing and pilots/crew equipment.

(13) Decals; restricted to decals used on aircraft.

(14) Replacement of consumable special tools and IMRL allowance list items, and cost incurred for IMRL repair.

(15) Packing, Preparation and Preservation. Items consumed in interim packaging/preservation of aviation fleet maintenance repairables.

(16) Forms and Publications. Maintenance Action Form (MAF), MAF Bags, equipment condition tags, publications, etc., used in support of direct maintenance of aviation components or aircraft.

(17) Authorized special purpose clothing for dirty work while performing maintenance of aircraft.

(18) Replacements of General Purpose Electronic Test Equipment (GPETE) allowance items, which are missing or unserviceable (COG 7Z).

(19) Civilian field teams (CFT); contract labor support (CLS), or any non-military maintenance contracts charged to direct support of aviation fleet maintenance requires MARFOR/4th MAW approval prior to initiation of contract. Requirements for direct support of aircraft and/or support equipment will be submitted to the MARFOR/4th MAW documenting:

(a) Specific tasking or "statement of work" identifying total requirements.

(b) Longevity of the contract based on calendar dates.

(c) Daily or weekly units of work or production as outlined within the contract agreement.

(d) Recurring weekly, monthly, or annual contracts are not authorized without express approval of 4th MAW and CNRFC N-8.

(e) 4th MAW Assistant Chief of Staff, Aviation Logistics Division (ALD) will conduct annual reviews for requirements and validity of contracts prior to renewal.

b. AVDLR or NSA ADLR

(1) High cost assemblies repairable at the IMA or MALS maintenance department.

(2) Items have a standard unit price (SUP) and a net unit price (NUP).

(a) SUP is the cost per unit as ordered from the supply system without a corresponding carcass turn-in or exchange.

(b) NUP is a reduced unit price for carcass charges that have been or will be returned to the supply system for repair. The requisition is charged the NUP when the carcass is available for turn-in to the supply system.

(c) In the event the carcass is not returned to the supply system, the SUP is charged. There are designated "grace periods" for CONUS/OCONUS geographical sites to allow for removal, packaging, and return shipment of carcasses to the Naval Supply System Designated Overhaul Point (DOP). However, failure to return the carcass to the supply system within the specified time period results in additional charges to the AVDLR OPTAR. The additional carcass charges, standard price vice net price, are significant and impacts directly on the CPH of the aircraft.

9. Unauthorized OMA, IMA and AVDLR Charges

a. Any charges of materials, parts, or supplies not directly related to the maintenance or support of aircraft, aviation ground support equipment, or aviation-peculiar support equipment.

b. Buildings and grounds upkeep.

c. Additional items such as:

(1) Shipment of aviation parts (RFI or Non-RFI), materials, or any organic supplies and equipment. Transportation charges for government or commercial shipments or shipping services to include FEDEX, UPS, and other CONUS/OCONUS shipments.

(2) Office equipment leases or purchases, to include copiers, computers, and other labor-saving administrative equipment.

(3) Non-aviation related services or support agreements.

(4) Facilities, building and grounds, and runway/ramp repairs or renovation.

(5) Furniture, household-cleaning supplies, material handling equipment or services.

(6) Transportation or vehicle rental agreements other than aircraft handling/towing equipment.

(7) Mailing or correspondence materials and services.

(8) Civilian labor, software, or technical services requirements not approved by the TYCOM.

(9) Food and beverages.

10. Cost Per Hour (CPH). The CPH for a specific aircraft is computed by adding all related direct support requirements from the FHCR (fuel, OMA, IMA

and AVDLR) to the total obligations, and dividing by the number of executed hours within the same time period.

a. Fuel obligations for each Type/Model/Series (T/M/S) divided by executed hours = Fuel CPH.

Example: F/A-18A ($8,805,126 ÷ 8,304.3 Hours) = $1,060 Fuel CPH

b. Obligations by T/M/S divided by hours for all squadrons = CPH (less CNRFC N-8 withholds). The CPH for OMA, IMA and AVDLR equation is as follows:

(1) Example: Obligations for F/A-18A ÷ Hours for F/A-18A = CPH

OR

(2) OMA/IMA (14,050,589 ÷ 8,304.3) = $1,691 CPH
AVDLR (22,027,553 ÷ 8,304.3) = $2,652 CPH

11. Indirect Support. Commonly referred to as Flying Hour Other (FO) accounts require the same reporting as direct support. FO costs are not considered in the CPH calculations. However, under-funding FO accounts impacts significantly on the overall FHP.

a. Authorized IMRL/TBA Charges

(1) Individual Material Readiness Lists (IMRL); NSA Material and (IMRL) initial issue.

(2) Marine Table of Basic Allowance (TBA); approved allowance items initial issue and replacement.

b. Unauthorized IMRL/TBA Charges

(1) Purchase/requisition of non-IMRL/TBA allowance list items.

(2) Services or repairs of IMRL/TBA items.

(3) Contract or contractor support.

c. Authorized OAS Charges

(1) Mobile facilities (MF-vans); repairs, preventative maintenance and replacements of parts for the vans, air conditioning, and generator support.

(2) Weather (WX); authorized maintenance and repair parts, supplies, and services related to aviation support.

(3) MACS/EAF; authorized maintenance and repair parts, supplies, and services related to aviation support.

(4) Logistics/Technical Contractor Support; authorized technical assistance and training support contractors approved by CNRFC/N-8/4th MAW. Contractors for technical, logistics, or maintenance support charged to indirect support requires CNRFC/N-8/4th MAW approval prior to initiation of the contract. Requirements will be submitted to the CNRFC/N-8/4th MAW documenting:

(a) specific Specific tasking or "statement of work" identifying total requirements.;

(b) longevity Longevity of the contract based on calendar dates.;

(c) daily Daily or weekly units of work or production as outlined within the contract agreement.;

(d) recurring Recurring weekly, monthly, or annual contracts are not authorized without express approval of CNRFC/N-8/4th MAW.;

(e) 4th MAW/CNRFC N-8 will identify and submit all approved maintenance contracts as identified in enclosure 7. "Contract Maintenance Report". and

(f) 4th MAW Assistant Chief of Staff, ALD and CNRFC N-8 will conduct annual reviews for requirements and validity of contracts prior to renewal.

(5) Repair of TBA allowance end items - authorized maintenance and repair parts, supplies, and services related to aviation support.

(6) Range fees and airfield operations charges in support of aviation T&R missions. These charges are handled directly by CNRFC N-8.

d. Unauthorized OAS Charges. Obligations that are not specifically for the support of the aircraft maintenance requirements as listed above, as well as transportation or shipping services for any purpose.

e. Authorized TAD Charges

(1) Temporary Additional Duty (TAD) travel and per diem charges for aviation support or related requirements for military and Government employees.

(2) School quotas for aviation squadron or unit training.

(3) Squadron or unit training for aviation related readiness.

(4) Factory maintenance training.

(5) Trans-Pacific or Trans-Atlantic for aircrew and maintenance support personnel regardless of the chain of custody of the aircraft.

(6) Crew Rotation (CONUS). Rotation of crews within squadron.

(7) Travel and per diem for military and Government employees to conduct site visits and inspections of aviation logistics and maintenance operations ashore or afloat.

(8) Site surveys for air operations and deployments. Attendance at aviation related planning or technical conferences.

(9) Deployment (within/outside CONUS).

(10) Emergency quarters while on extended missions.

f. Unauthorized TAD Charges

(1) Funding of travel for military spouses and/or family members, civilian contractors, or non-government employee is not authorized.

(2) Funding military personnel or Government employees traveling for non-aviation related support to include conferences, seminars, and site visits.

(3) Funding travel of emergency leave or morale leave.

(4) Funding travel for personal business or official business not related to the support of aircraft or Marine Aviation.

g. Authorized TOT Charges

(1) Transportation of Things (TOT) includes costs of transportation of ready for issue (RFI) aviation parts, materials, and related things chargeable to aviation operating force funds. Trans-shipment of supply system parts via Government shipping channels to include Air Mobility Command (AMC), Military Sealift Command (MSC), or contract commercial sources (FEDEX/UPS/DHL) as appropriate to meet delivery date requirements.

(2) Costs are limited to transportation of organic (squadron owned) aviation material to include support equipment and maintenance tools in support aviation operations and training.

(3) The CNRFC N-8 and 4th MAW ALD-C establishes and funds Transportation Account Codes (TAC) for transportation and movement of TOT in support of specific operations and exercises. The TAC permits units to cite the appropriate TAC for billing of AMC, MSC, or commercial carriers obligations. TOT funds are withheld by the 4th MAW/site comptrollers to cover individual unit TAC obligations.

(4) Packaging and preservation materials and supplies used in processing authorized shipments of aviation parts and support equipments.

(5) Lease/rental agreements for forklifts, flight line delivery vehicles and other materials handling equipment.

(6) Transportation or vehicle lease/rental agreements other than aircraft handling/towing equipment used to support flight line operations, delivery and movement of aircraft parts and supplies.

h. Unauthorized TOT Charges

(1) Shipment of Non-RFI components to depot level or commercial repair sites (CONUS or OCONUS) or to other Naval Supply System designated activities.

(2) Transportation, packaging, or storage of personal effects, household goods or privately owned vehicles. These charges should be referred to the appropriate Transportation and Movement Office (TMO) for proper disposition.

(3) Commercial shipping agreement contracts or services (Fedex, UPS, or other commercial shippers) not specifically approved by 4th MAW ALD and the CNRFC N-8.

12. Reserve Activation and Contingency Operations

a. Upon activation, the Gaining Force Command (GFC) will fund, via O&M,N, all flight hour operations to include Flying Hour Other(FO) costs. Activated reserve squadrons are funded, directly or indirectly, by reimbursable funds for all contingency flight hours.

(1) Direct Funding. The activated reserve squadron is attached to an active duty MAW that supplies all support required. On the activation date, the activated reserve squadron is funded by the GFC through the MAW.

(2) Indirect Funding. The activated reserve squadron, when not directly attached to an active duty MAW, is funded on the activation date by reimbursable documents from the GFC sent to Navy Reserve site comptrollers.

b. Contingency Operations. A military operation that is either designated by the Secretary of Defense as a contingency operation, or becomes a contingency operation as a matter of law. Contingency operations flight hours are conducted in support of contingency operations as delineated by the TYCOM directions. For budgeting purposes, contingency hours are "executed hours," flown as direct or indirect support of designated contingency operation(s).

c. MARFORCOM/MARFORPAC/4th MAW is responsible for the accurate and timely reporting of contingency hours and financial obligations. Assistant Chief of Staff, G-3/4th MAW ALD-C will document, record, report, and maintain files for contingency hours and obligated funding for contingency operations. Execution data of contingency hours will reflect total hours and total costs for each contingency operation and be maintained as separate entities by contingency location (for multiple sites and/or deployments), aircraft T/M/S, and funding category obligations (fuel/consumables/ contracts/AVDLR/FO). CPH and (FO) costs will reflect ongoing operations, identifying activated reserve squadrons costs as separate entities for financial reporting purposes.

(1) Activated reserve squadron contingency hours, when using direct funding, will be identified by T/M/S and reported monthly to the TYCOM as coordinated by the MARFOR. The MARFOR providing the financial resources for the activated reserve squadron(s) will report the executed hours and costs. This report is exempt from reports control per reference (m), part IV, paragraph 7.q.

(2) Contingency hours, for activated reserve squadrons using reimbursable funding, will be reconciled monthly between the active MAW, 4th MAW, and the MARFOR (G-3 for executed hours and Comptroller/G-8 for obligated costs). 4th MAW will identify by T/M/S and report the contingency hours and costs to the MARFOR that is providing the financial resources.

d. T&R flight hours lost (under executed or not executed) while supporting contingency operations shall not be flown in addition to programmed T&R hours for subsequent months of execution or flown in excess scheduled hours in other squadron(s) with same/similar aircraft or missions, unless mission requirements dictate.

e. Movement of under executed flight hours to satisfy T&R requirements for a squadron's lost hours should be done to create normal utilization of aircraft and to complete aircrew T&R requirements. Over-flying to meet total execution of Wing SBTP is prohibited. Each hour should reflect a T&R requirement and a corresponding contingency hours offsets.

f. Activated reserve squadron hours for contingency operations and CONUS training will be logged by aircrew, identified by T/M/S, and reported monthly to the TYCOM using their activated ORG code (listed in chapter 4, page 13 paragraph 14c) as coordinated by the MARFOR and MARFORRES/4th MAW. The MARFOR providing the financial resources for the activated reserve squadron(s) will report the executed hours and costs.

13. Frequently Used Financial Acronyms

AFM	Aviation Fleet Maintenance
AG	Activity Group
AIMD	Aviation Intermediate Maintenance Department
ALD-C	Aviation Logistic Division Aviation Supply
ASD	Aviation Supply Department
ASHE	Aviation Support Handling Equipment
AVDLR	Aviation Depot Level Repairable
BISOG	Blue (Navy $$) in Support of Green (USMC $$)
CLS	Contractor Logistics Support
CNAF	Commander, Naval Air Forces (see CNAP)
CNAL	Commander, Naval Air Forces, Atlantic
CNAP	Commander, Naval Air Forces, Pacific
CNRFC	Commander, Naval Reserve Forces Command
DFAS	Defense Financial and Accounting Services
FAS	Fleet Air Support
FastData	Fund Administration and Standardized Data Automation
FAT	Fleet Air Training (see FRS)
Fuel	Fuel funding Category
FHCR	Flight Hour Cost Report
FHP	Flying Hour Program
FHPS	Flying Hour Projection System
FRS	Fleet Replacement Squadron (see FAT)
GSE	Ground Support Equipment
IMA	Intermediate Maintenance Activity
IMRL	Individual Material Requirements List
JON	Job Order Number
MACP	Marine Aviation Campaign Plan
MALS	Marine Aviation Logistics Squadron
MARFOR (COM/PAC/RES)	Commander, U.S. Marine Corps Forces (Command/Pacific/Reserve
MF vans	Mobile Facilities vans
OAS	Other Aircraft Services
OMA	Operational Maintenance Activity Category
OMNR	Operational and Maintenance, Navy Reserves
OP-20	Flying Hour Program DON Budget Exhibit
PAA	Primary Aircraft Authorization
POM	Program Objective Memorandum (even year)
PPBE	Planning, Programming, Budgeting, Execution
PR	Program Review (odd year)
SAD	Aviation Supply Accounting Division
SAG	Sub Activity Group
TACAIR	Tactical Aircraft
TAD	Temporary Additional Duty
TBA	Table of Basic Allowance

TECOM	Training and Education Command
TL	Transmittal
TMS	Type Model Series of Aircraft
TOT	Transportation of Things
TYCOM	Type Commander

14. AC/RC Terminology Crossover

Active Component (AC)	Reserve Component (RC)
Budget OPTAR Report (BOR)	Flying Hour Cost Report (FHCR)
Fund Code 7B	Fuel
Fund Code 7F	Squadron Flight Equipment/Admin Supplies
Fund Code 7L	OMA and IMA Consumables Parts/Supplies
Fund Code 9S	AVDLR - Repairable Component/Assembly
Operational Functional Category (OFC)	Fuel, OMA, IMA and AVDLR
OFC-01	Fuel
OFC-09	IMRL/TBA
OFC-10	Other Aircraft Support, MF, EAF
OFC-21	TAD
OFC-23	TOT
OFC-50	OMA, IMA and AVDLR

Chapter 6

Contracts and Contract Maintenance Procedures

1. General. HQMC (DC AVN) is responsible for planning, executing, budgeting, and managing the Marine FHP for active and reserve components and serves as the service level advocate for FHP requirements within the Department of the Navy. The following paragraphs define procedures for the initiation, changes, and contingency requirement contracts for direct (AFM) and indirect (FO) funds. The purpose of this enclosure is to provide standardized procedures for the initiation of new contracts for funding considerations and updating contracts in place, prior and within the execution year. The core element of this Order is to standardize the reporting and monitoring of all contracts, direct and indirect.

2. MARFORs. Function as the resource sponsors with oversight authority and TYCOM-level representatives to validate and approve contracts involving manpower and contract maintenance for active component and activated reserve aircraft. MARFORRES will incorporate the requirements for reserve component squadrons based on guidance provided by CNRFC (N8).

3. Direct and Indirect Contracts. Contracts are defined by their impact to readiness and funding, direct or indirect.

a. Direct Contracts. Direct contracts are documented as readiness requirements and directly impact the Cost per Hour (CPH) for specific T/M/S. Direct maintenance contracts must be validated via the Cost Adjustment and Visibility Tracking System (CAVTS) each fiscal year and submitted to HQMC (DCA) for approval and submission to OPNAV N4 for final approval inclusion into the annual budget process. No contracts will be approved without justification and approval by HQMC (DCA).

b. Indirect Contracts. Indirect contracts are documented as readiness requirements but do not directly impact the CPH and are funded as level of effort with Flying Hour, Other (FO) funding. Indirect contracts will be reviewed at mid-year review for the upcoming year of execution. Expectations are that contracts will be reduced as new programs mature during normal transition of responsibilities to Marine Corps efforts. Programs deemed behind in training or delayed in implementation will be re-evaluated as required.

4. Emergent Contract Requests. New or emergent, and contingency operations requirements for Contractor Field Team (CFT) or contracts that are not captured as outlined in enclosure chapters (54) and (65), will be documented by the MARFORs and submitted to HQMC (DC AVNVN) via naval message with the following minimum standard information:

a. Description of Requirement including applicable contingency operations or event(s) necessitating the requirement.

b. Description of current manpower limitations or constraints (T/O, ASR, staffing goal, qualifications, etc.) necessitating CFT or augmentation support.

c. Other mitigating options considered/applied and courses of actions.

d. Specific number of contract personnel required with methodology for number of personnel required.

e. Statement of Work: Specific terminology of contract purpose and requirements.

f. Longevity: (Start/End Dates)

g. Contract/Contractor Performance Metrics:

(1) Aircraft Readiness level;

(2) Number of repairs or actions per month;

(3) Pass or Fail guidelines, if applicable,

(4) Acceptable levels of delays.

h. Periodic Reviews: Monitoring tools/reports.

i. Manpower/Force Analysis.

j. Reductions/Trade-offs (funding analysis).

k. Total Cost with methodologyMethodology. Man-hour cost/rate.

l. Exit Criteria.

5. HQMC (DC AVN). Upon review and validation of the contracts, DC(AVN) will forward requirements to OPNAV, CFFC, and other commands as necessary for coordination and execution. MARFORs will incorporate the new CFT/contract into the existing quarterly and annual reports as required by enclosure 6.

6. Contingency/Baseline Contract Overlap. Contingency operations contracts costs, as outlined in chapter 4, paragraph 13., should not directly impact the direct Cost per Hour (CPH) for specific aircraft or FO accounts except in the current year of execution. Therefore, contingency support contracts (funded by FHP or FO) will not "overlap" or "piggyback" direct or indirect contracts funded by baseline OP-20 funds.

a. Contingency contracts will be generated for a set period of time with an expiration date not to exceed current execution end of year or 12 months, which will be reported quarterly and reviewed semi-annually, by the MARFOR (ALD) and HQMC (ASL).

b. Funding for contingency contracts will be exempt from end of year reporting for Cost per Hour (CPH) computation for designated aircraft.

c. Contingency contracts will not supplement or bridge contracts paid by baseline funding of the FHP.

d. Submission and approval process will be the same as new or emergent requirements.

7. CAVTS Procedures. Naval Air Systems Command/OPNAV Cost Adjustment, Visibility, and Tracking System (CAVTS) Procedures.

a. A Cost Adjustment Sheet (CAS) is created for each contract that is tied directly to an aircraft TMS and impacts the CPH. A CAS may be initiated at any level and forwarded through the appropriate chain of command to the cognizant MARFOR.

b. MARFORs will submit the CAS via CAVTS website to OPNAV (N43), via HQMC (APP), for review and approval. Once approved, N43 will enter them into the budget. If not approved they will not be entered into the baseline CPH. All contracts will be reported to HQMC. Specific CAVTS information and worksheets may be obtained from the CAVTS website at http://logistics.navair.navy.mil/cavts/index.cfm.

Chapter 7

GLOSSARY

1. General. The following terms are vital to understanding the Flying Hour Program and the intrinsic tie between the T&R, funding levels, and unit level readiness.

2. Definitions

Activate. Order to active duty (other than for training) in the federal service. JP 1-02.

Aircraft Program Data File (APDF). An 11-year projection that depicts the Primary Aircraft Inventory (PAI) for each unit funded under the aircraft-operating program. Provides the basis for budgeting documents used to provide funding for Naval Aviation operations, maintenance, spare parts, and manpower. It is a budgeting document, not a requirement document. PAI cannot exceed projected inventory in future years.

Appropriation. Authorization by an act of Congress that permits Federal agencies to incur obligations and make payments from the Treasury. An appropriation usually follows enactment of authorizing legislation. An appropriation act is the most common means of providing budget authority (see Budget Authority (BA)). Appropriations do not represent cash actually set aside in the Treasury; they represent limitations of amounts, which agencies may obligate during a specified time period.

Aviation Depot Level Repairable (AVDLR). NAVICP Philadelphia manages 7R Cog repairable material that must return to depot for repair if they are beyond the intermediate maintenance level capability or declared beyond economic repair. AVDLRs are allowance items appropriated by NAVICP using NWCF funds approximately two years before the anticipated need of fleet activities to accommodate for long production lead times. Requisitioning of AVDLRs by squadrons using current FY O&M, N or, in some cases APN-6 funds for initial outfitting or changes in allowances, reimburses the NWCF and allows NAVICP to replenish material. Squadron expenses are reported on the monthly Operating Target Functional Category (OFC-50) Budget Optar Report (BOR) under fund code 9S. The OP-20 reflects AVLDRs under Special Interest Category (SIC) "FA" and is part of the Cost Per Hour calculations.

Aviation Fleet Maintenance (AFM). Organizational and intermediate level maintenance funds granted to procure consumable parts, materials, tools, lubricants and services to repair aircraft, support equipment, or aeronautical components. Squadron expenses are reported on Budget Optar Report (BOR) under fund code 7L. The OP-20 reflects AFM under special interest category (SIC) "FM" and is part of the Cost Per Hour calculations.

BISOG. "Blue in Support of Green;" a term that identifies appropriations from the SECNAV level that support Marine Aviation.

Budgeted Hour. AN OP-20 term that defines how many hours or hours per crew per month (H/C/M) that are actually funded as a result of the PPBE process.

Contract Maintenance. Aircraft maintenance and support services outsourced to civilian or NWCF activities to support squadron operations when military personnel and/or equipment are not available or as economical as a Contract Field Teams (CFT). Contracts are written and approved at either the fleet

command level or NAVAIRSYSCOM and are financially managed at the TYCOM level. The costs are calculated based on fixed and variable estimates. Fixed cost obligate funds regardless of hours flown, while variable costs are determined by planned squadron hours. Contract Maintenance is seen as SIC "FW" on the OP-20 and is part of the cost per hour calculations.

Core Capability. A standardized measure of performance that a MAGTF Commander should expect during sustained contingency/combat operations. Combat flight operations define core capability in terms of daily-sustained sortie rate, or operational coverage, in support of a Mission Essential Task List (METL). This capability is the basis for the number of core skill proficient crews, and flight hours, required to maintain T-2 level readiness.

Core Competency Model. The basic structure which each T&R is built around. The Core Competency Model links community mission statements, METL, Core Capability Statements, Core Skill Proficiency and Combat Leadership requirements. The number of hours, or funding, required is determined by the number of aircrew necessary to execute the tasks stated in METLs and core capability statements.

Core Competency Resource Model (CCRM). Directly links the T&R program with the USMC flying hour and readiness-reporting (SORTS) program. It generates annual sortie and flight hour requirements (broken down by training, support, operational categories) for maintaining selected T-level readiness ratings for each tactical aviation squadron.

Core Model Minimum Requirement (CMMR). The minimum number of crews necessary in each particular core skill for a unit to accomplish its mission and METLs. CMMR and flight leadership requirements are the foundation of a unit's flying hour requirement and are a direct tie to unit level readiness.

Core Skill Proficiency (CSP). The number of individuals, or crews, required to be proficient in each designated core skill. An individual is considered Core Skill Proficient when they have completed, and maintain currency in, the requisite T&R syllabus for that particular core skill.

Cost Per Hour (CPH). The CPH represents the historical as well as the expected maintenance costs to train aircrews to fly one flight hour. It is a summation of fuel, AVDLR, AFM (consumables), and contract maintenance CPH. The historical CPH represents the actual cost reported by squadrons from Budget Optar Reports (BOR) while budgeted CPH signifies an OP-20 calculated estimate based on planned hours for each T/M/S. The budgeted CPH uses the last completed year of execution data as the baseline for OP-20 programming and then escalates the CPH by adjustment sheets, Center for Naval Analysis aircraft aging factor, NAVICP Logistic Engineering Change Proposals and NAVAIR contract estimates. (See definitions in this enclosure). Example; FY03 budgeted CPH was calculated using FY01 actual CPH and inflating it. FY04 budgeted CPH was calculated using FY02 actual CPH and inflating it.

Crew. As utilized for OP-20 and FHP purposes, a crew is the number of pilots required to fly an aircraft. For a single-piloted aircraft such as the AV-8B, a crew is one pilot. For a dual-piloted aircraft such as the CH-46 or KC-130, a crew is two pilots.

Flight Hour. A flight hour within the OP-20 represents the sum of Training, Support, and Operational hours. Calculating a flight hour requirement is dependent upon the schedule where the T/M/S flies its primary mission.

Future Year Defense Program (FYDP). A five-six year plan born from the PPBE process as a basic planning and programming tool that builds on a previously developed FYDP linking policy, strategy, and objectives to specific forces and major programs for all DOD components. The primary data element in the FYDP is the Program Element (PE).

Intermediate Level Maintenance. AFM functions assigned to ships, MAGs, and MCASs supporting aircraft and other designated aviation units that are separate from squadron (organizational) level routine maintenance functions.

Major Claimant. Budget Submitting Office (BSO) (e.g. CFFC) designated as an administering office under the Operation and Maintenance appropriation, which receive operating budgets directly from the CNO.

Mobilization. In accordance with Joint Publication 1-02 "1. The act of assembling and organizing national resources to support national objectives in time of war or other emergencies. 2. The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency."

Navy Working Capital Fund (NWCF). The NWCF is a revolving fund established to purchase stock material carried in the ship and MALS Supply Officer's stores. The MALS obligate NWCF dollars to provide items for stock issued to all end-use customers. The fund is reimbursed when material is issued for use by charging the customer's OPTAR and crediting the NWCF.

Operating Budget. The annual budget and financial authority of an activity or command containing the resources to perform its mission. TYCOMs subdivide their expense limitation(s) into various operating budgets. Some operating budgets are retained by the TYCOM (e.g., those operating budgets used to fund ships' TAD) and others are issued directly to lower levels of command (e.g., shore activities).

Operating Target (OPTAR). An estimate of the amount of money, which will be required by an operating ship, MAG, staff, squadron, or other unit, to perform the tasks and functions assigned. Commanding Officers may give subordinates a degree of financial responsibility paralleling their other responsibilities by the administrative procedure of issuing OPTARs for funds that are planned for utilization by the subordinate commander. OPTARs are administrative limitations and not legal subdivisions of funds, and the issuing commander retains all legal and accounting responsibility.

OPTAR Functional Category. A system whereby the various categories of O&M, N budgeting and funding are assigned a numerical designator. Each OFC supports a particular function/purpose.

Operations & Maintenance, Navy (O&M,N). An appropriation granted (or authorization) by Congress to Marine Corps and Navy operating forces to include the operations and maintenance of Marine Corps aircraft.

OP-20. A Department of the Navy (DON) planning document published by the Special Assistant for the FHP several times per year to establish the annual flying hours by T/M/S, which is used for FHP funding and fleet planning. Requirements are computed by using historical data and revised with MARFORs input. The OP-20 shows: required hours, crew seat ratios, force structure, and staff hours; budgeted hours; cost per hour by TMS; total costs by budget line item; and total T/M/S costs. See chapter 2 for detailed methodology.

OFC-01 Petroleum, Oils, Lubricants. Funding for POL consumed in flight operations, flight equipment, and squadron administration in support of the FHP.

Planning, Programming, Budgeting, and Execution (PPBE) System. A DOD decision-making process to allocate limited resources among many competing requirements within the services and between the services.

Program Objective Memorandum (POM). A biennial document that is a product of the programming phase of the PPBE. POM describes and recommends total DOD component resource and program objectives to SECDEF and is submitted only for even number years. Odd number years are called Program Reviews (PR). While POM cycles represent a new, complete assessment of all requirements across the FYDP, PR cycles are usually a revalidation of the POM.

Schedule A. An OP-20 category that identifies all Program Elements (PE) whose T/M/S primary mission is a TACAIR role. For the Marine Corps, this includes any MAG aircraft except FRS squadron aircraft.

Schedule B. An OP-20 category that identifies all Programs Elements (PE) whose T/M/S are within the Fleet Replacement Squadron (FRS) and whose primary mission is training of Category I-V pilots and aircrews.

Schedule C. An OP-20 category that identifies all Program Elements (PE) with T/M/S identified as Fleet Air Support (FAS) and whose primary mission is command and control and logistics support. Schedule C T/M/S are commonly assigned to the air station and are controlled by the COMCAB/MAW or higher command.

Schedule D. An OP-20 category that identifies all Program Elements (PE) with T/M/S assigned to MARFORRES/4th MAW.

Sortie. As defined in OPNAVIST 3710.7T, a sortie begins when the aircraft first moves forward on its takeoff run or takes off vertically from rest at any point of support and ends after airborne flight when the aircraft is on the surface and either.

NOTE 1: The engines are stopped or the aircraft has been on the surface for 5 minutes, whichever comes first.

NOTE 2: A change is made in the pilot in command.

NOTE 3: For helicopters, a flight begins when the aircraft lifts from a rest point or commences ground taxi and ends after airborne flight when the rotors are disengaged or the aircraft has been stationary for 5 minutes with rotors engaged.

NOTE 4: A sortie is primarily tied to a single aviation event, or T&R code; however it must be associated with a flight-time for purposes of planning and budgeting. The following flight times are the prescribed sortie lengths per T/M/S.

AV-8B	1.1
EA-6B	2.0
KC-130	2.0
AH-1W	1.5
UH-1N	1.5

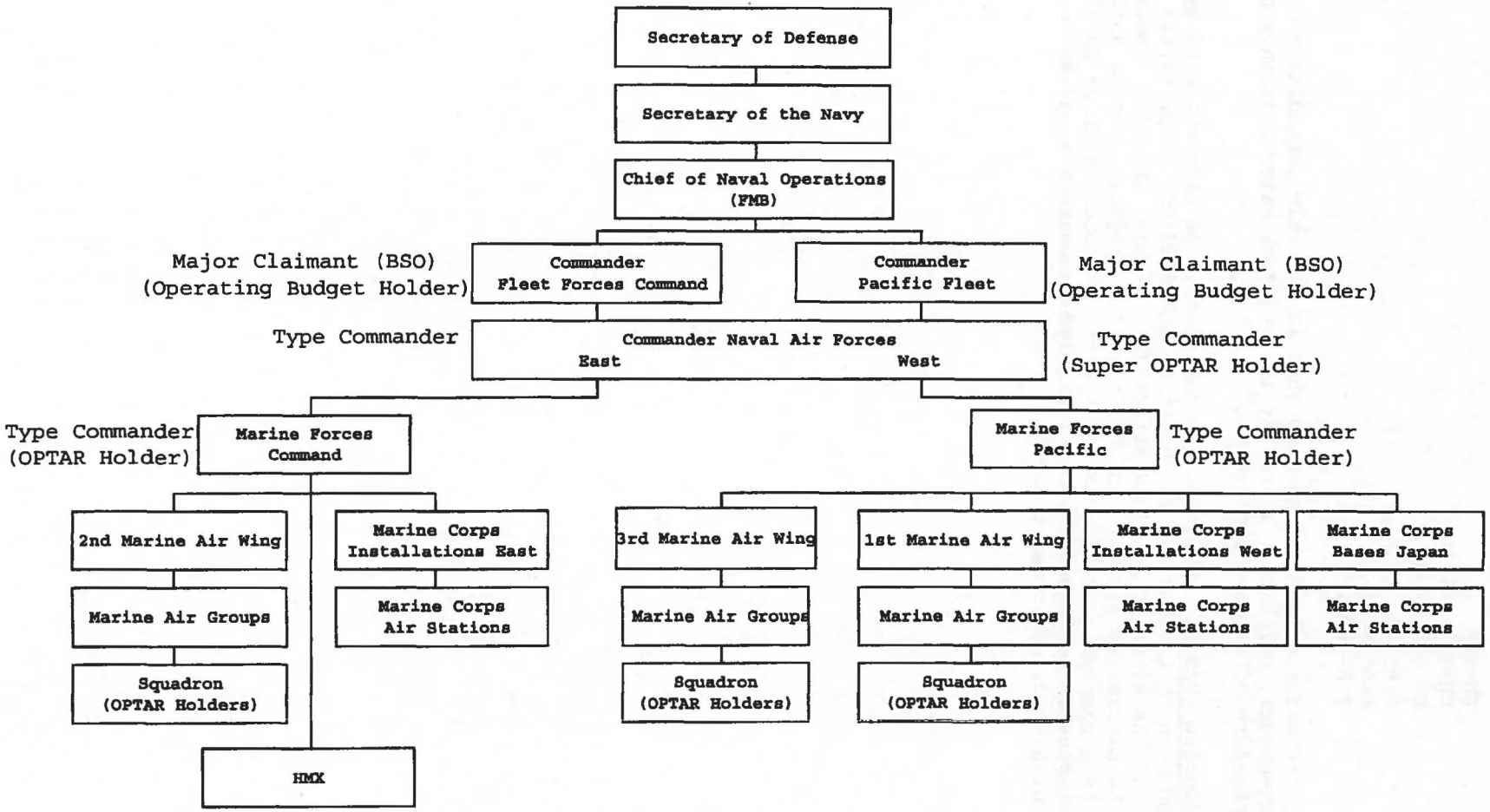
CH-46E	1.5
CH-53E	1.5
CH-53D	1.5
F/A-18A	1.3
F/A-18C	1.3
F/A-18D	1.3

TYCOM. An intermediate level of command that is directly subordinate to the Combatant Commander. Financial authority is issued by major claimants to TYCOMs in the form of expense limitations.

Type/Model/Series (T/M/S). The specific designation of aircraft used by the military and used by the DON FHP for planning and funding. Type refers to the mission of the aircraft, such as attack (A), fighter (F), etc. Model refers to the particular airframe in that mission category, such as an F-18. The series is a particular configuration within the model, such as CH-53D. The series indicates equipment that is installed on board that gives it individual mission or performance capabilities.

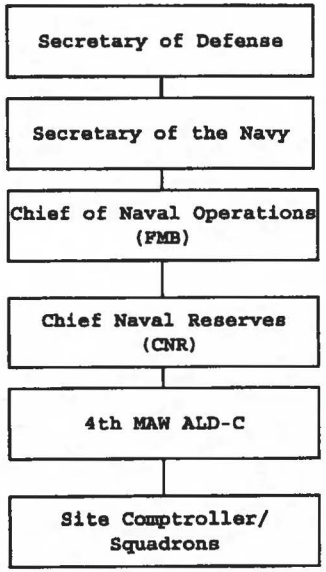
APPENDIX A

MARFORCOM/MARFORPAC FLYING HOUR PROGRAM ADMINISTRATIVE CHAIN OF COMMAND AND FLOW OF FUNDS



APPENDIX B

MARFORRES FLYING HOUR PROGRAM ADMINISTRATIVE CHAIN OF COMMAND
AND FLOW OF FUNDS



Major Claimant
Type Commander

(Operating Budget Holder)

UNITED STATES MARINE CORPS
1ST MARINE AIRCRAFT WING
UNIT 37101
FPO AP 96603-7101

IN REPLY REFER TO:
4790
AMI/MCI
5 NOV 15

From: ALMAT Officer, 1st Marine Aircraft Wing
To: Commanding Officer, Heavy Marine Helicopter Squadron 463
Via: Commanding Officer, Marine Aircraft Group 24

Subj: AIRCRAFT MAINTENANCE RE-INSPECTION/MATERIAL CONDITION INSPECTION RESULTS

Ref: (a) COMNAVAIRFORINST 4790.2B CH-1
(b) WgBul 5040.2

Encl: (1) Aviation Maintenance Inspection Overview
(2) Program Grade Sheet
(3) Drills and Practicals
(4) MCI Report
(5) Computerized Self-Evaluation Checklist (CSEC) Discrepancy Report

1. In accordance with the references, the 1st Marine Aircraft Wing (MAW) Aviation Logistics Management and Training (ALMAT) team conducted an Aviation Maintenance Re-Inspection (AMI) of Heavy Marine Helicopter Squadron 463 (HMH-463) during 2-5 November 2015.

2. The 1st MAW ALMAT team inspected 39 NAMP programs for compliance with governing directives: 34 programs are graded as "On-Track", four programs are graded as "Needs More Attention", and one program is graded as "Off-Track". A comprehensive list of discrepancies has been provided to the Maintenance Department.

3. The overall grades for HMH-463 are:

a. Maintenance Department: SAT (94%)

b. Support Equipment MCI: UNSAT

c. Aviation Life Support Systems (ALSS) MCI: SAT

d. Aircraft MCI: SAT

4. Command attention is required in the following deficient areas:

a. Needs More Attention Programs:

(1) Fuel Surveillance
(2) SE Planned Maintenance System (SEPMS)
(3) Logs and Records
(4) Aircraft Armament Equipment (AAE)

b. Off-Track Program:

(1) Taxi/Turn-Up/APU Licensing

ENCLOSURE (203)

Subj: AIRCRAFT MAINTENANCE INSPECTION/MATERIAL CONDITION INSPECTION RESULTS

5. In conjunction with the AMI/MCI, 77 contingency response drills and practical proficiency examinations were conducted: 74 are graded as "Satisfactory" and three are graded as "Unsatisfactory".

6. Command attention is required in the following deficient areas:

a. Unsatisfactory Drills/Practical Applications:

(1) AUL Update/Change Procedures
(2) Pre-Op NAN4
(3) RSL Inventory/Maintenance

7. Program managers and personnel who merit special mention for the high quality of their performance during the inspection:

)(6) (b) (3) 10 USC § 1	Laser Safety Program
	Certification and Qualification Program
	Oil Analysis Program
	Foreign Object Damage Program
	ACSP Entry Supervisor
	Fuel Samples
	Fuel Samples

8. The points of contact for further assistance are (b)(6) (b) (3) 10 USC § 130b

(b)(6) (b) (3) 10 USC § 130b

Copy to:

CO, MAG-24
CO, HMH-463
AMO, HMH-463
QA, HMH-463
ALMAT Inspection Files

UNITED STATES MARINE CORPS
1ST MARINE AIRCRAFT WING
UNIT 37101
FPO AP 96603-7101

IN REPLY REFER TO:
4790
AMI/MCI
3 SEP 15

From: ALMAT Officer, 1st Marine Aircraft Wing
To: Commanding Officer, Marine Heavy Helicopter Squadron 463
Via: Commanding Officer, Marine Aircraft Group 24

Subj: AIRCRAFT MAINTENANCE INSPECTION/MATERIAL CONDITION INSPECTION RESULTS

Ref: (a) COMNAVAIRFORINST 4790.2B CH-1
(b) WgBul 5040.2

Encl: (1) Aviation Maintenance Inspection Overview
(2) Program Grade Sheet
(3) Drills and Practicals
(4) MCI Report
(5) Computerized Self-Evaluation Checklist (CSEC) Discrepancy Report
(6) Aviation Logistics Information Management and Support Department (ALIMS) Overview and Discrepancies

1. In accordance with the references, the 1st Marine Aircraft Wing (MAW) Aviation Logistics Management and Training (ALMAT) team conducted an Aviation Maintenance Inspection (AMI) of Marine Heavy Helicopter Squadron 463 (HMH-463) during 31 August - 4 September 2015.

2. The 1st MAW ALMAT team inspected 39 NAMP programs for compliance with governing directives: 17 programs are graded as "On-Track", four programs are graded as "Needs More Attention", and 18 programs are graded as "Off-Track". A comprehensive list of discrepancies has been provided to the Maintenance Department.

3. The overall grades for HMH-463 are:

a. Maintenance Department: UNSAT

b. Support Equipment MCI: SAT

c. Aviation Life Support Systems (ALSS) MCI: UNSAT

d. Aircraft MCI: UNSAT

4. Command attention is required in the following deficient areas:

a. Off-Track Programs:

(1) Quality Assurance Audit
(2) Tool Control
(3) Corrosion Prevention and Control
(4) Plane Captain Qualification
(5) Egress/Explosives System Check Out
(6) SE Operator Training and Licensing
(7) SE Planned Maintenance Systems
(8) Central Technical Publications Library
(9) Technical Directive Compliance
(10) Maintenance Control

ENCLOSURE (204)

Subj: AIRCRAFT MAINTENANCE INSPECTION/MATERIAL CONDITION INSPECTION RESULTS

(11) Logs and Records
(12) Data Analysis
(13) Material Control
(14) Aircraft Maintenance Material Readiness List
(15) Taxi/Turn Up/APU Licensing
(16) Explosive Handling Personnel Qualification and Certification
(17) Aviation Life Support System
(18) Support Equipment Misuse/Abuse

b. Needs More Attention Programs:

(1) Hydraulic Contamination Control
(2) Naval Aviation Metrology and Calibration
(3) Phase Maintenance
(4) Laser Hazard Safety

5. In conjunction with the MPA/MCI, 66 contingency response drills and practical proficiency examinations were conducted: 60 are graded as "Satisfactory" and six are graded as "Unsatisfactory".

6. Command attention is required in the following deficient areas:

a. Unsatisfactory Drills/Practical Applications:

(1) NALCOMIS Contingency
(2) AMSRR Verification
(3) CSEC Verification
(4) Pre-Op NAN4
(5) Pre-Op PMU72
(6) Work Center Work Load Report Validation

7. Program managers and personnel who merit special mention for the high quality of their performance during the inspection:

(b) (3) 10 USC	HAZMAT Material Spill
	HAZWASTE Disposal
	Respirator Check in/Check Out Procedures
	MSDS Locating
	HAZMAT Acceptance
	Pre-Op Tire Inflator

8. The points of contact for further assistance are (b)(6) (b) (3) 10 USC § 130b .

(b)(6) (b) (3) 10 USC § 130b

Copy to:

CO, MAG-24
CO, HMH-463
AMO, HMH-463
QA, HMH-463
ALMAT Inspection Files

(b)(6) (b) (3) 10 USC § 130b Airframes
7 months in the squadron.
9 Sept (b)(6) (b) (3) 10 USC § 130b met with the squadron at the club to review the inspection results. We will rise from the ashes.
You work day shift? Yes
0630 report 1500 get off. Now not back then.
During the fall, post failure when you showed up. How was morale? I was showing up at 0515 aTAF looking at pubs. I was the new guy. We got off around 1500.
When did you go to 12 on 12 off?
Don't remember.
(b) (6) .
Was his relief unexpected. I was at LCpl seminar. It was a surprise.
I guess it was for mission readiness.
Was there a good ops maint balance? Yes
Material readiness good in squadron? They are good.
What do you think is driving the low RBA? When the aircraft sit for awhile they don't like to cooperate.
We were shut down for so long. Once we started flying again, things started breaking.
Was maint control focused? Didn't see challenges with maint control.
Was anyone downing the plane and CDI's were questioned? Not the stamp. But the call. Saw this happen once or twice.
Purposefully downing? No sir.
Were you tired doing 12 on 12 off? I was. After 2 or 3 days you were tired. After the 5th day, you would rally.
Do you have all resources tools, supplies, to accomplish the mission?
There's an issue with parts. It does take awhile.
What part do you have to wait on? Little stuff. Cowling hinge pin. Now we have to wait a day for the expediter waiting for a stupid little pin.
Maint chief….don't have any problems with him sir.

ENCLOSURE (205)

(b)(6) (b) (3) 10 USC § 130b

Sept 3, 2014 arrived in squadron

CNAF went well. I switched to night crew and they wanted me to not be around.

Did you do MRF D. No

After CNAF, you went to PTA in January and flew. I went up there.

I was part of a rescue mission.

MERF D spring 15. Any challenges in getting the planes ready? Not that I recall.

Did you do a lot of canny? Me personally no.

FOD walk? You attend. Yes.

Are officers there? Yes.

Last Summer, MALS inspection and MRF D, what was your work schedule? Night crew

Came to work 1530-1600 leave around 0200. I'm day crew now.

What was your schedule in the fall starting day crew? We started 12 on 12 off. It was before Christmas.

When did you go to day crew? 3 months after MALS inspection. July/Aug.

Day crew the end of summer. 0600 show time. 1630 maint meeting at the end of the day.

Worked through maint meeting sometimes, depending on the job I was on.

Weekends? When we did 12 on 12 off.

How was morale? Kind of crappy when worked weekends. Weekdays? We got through it together.

How did people get along in maint? We tried to do our best.

There was a breakdown in communication? Yes sir.

Where was this? From what I could see. Control would pass word late in the day that could have been done earlier.

Were they always reacting? Sometimes they just had something dropped on their plate and then passed it to the shops. As workers why didn't they tell us earlier.

Did maint ever cut corners? Not gonna lie. Yes sir.

One time we tried to get aux tanks they told us to switch them off the static bird. Switch them off and try to see if they work.

Who made that call? Just a story I heard.

ENCLOSURE (20)

On a wiring repair. Sometimes splicing a wire instead of using a heating tool. Using a lighter. Faster so we can get the birds up. Getting a light cart with birds turning up. Splicing it and getting a wire.

Have you ever seen somebody work off a maf and they said they did it and they didn't. no. sometimes when I go out there I usually see a maf when I screen the book. I'd take care of easy fixes that I saw.

Were you surprised the CO got relieved? Yes kind of. We weren't mission ready, I don't know what else we could have done.

When did you find out? I was in Kona when I found out.

Who was in charge the night of the mishap? Not sure I was the GDO driver.

Did the old CO come down and talk to you guys, give guidance? No.

Did you ever see him on the hangar deck? Yes.

Were you around for PMA 261? I was there.

What do I know about 463 that I don't already know? Did they ever throw down? Yes. It happened sometimes.

Were the mishap aircraft safe? I'm pretty sure partial. They wouldn't let them fly with downers.

Any problems with GPWS? Yes and no. we had a back up system for that. AHARS compensates for this.

Did you have GPS problems on those birds? Not sure.

In the last year everyone was afforded time for the range, pt? depends on the shops. Working long hours.

Last group run? We usually do it with the sgtmaj. We tried to do it. Depended on the flight schedule.

SgtMaj said he didn't get enough time with the Marines…all work? Yes sir. Been awhile when doing a run with the colors.

Don't remember the last time we did a formation run. (this was before the relief).

(b)(6) (b) (3) 10 USC § 13

How long have you been in 463? Aug 4, 2013.

6323 Avi

Were you surprised the CO was relieved. I was on the range. I was surprised.

How was moral? We were working nonstop. The manhour didn't reflect the up aircraft numbers.

Were you day or night crew?

I live in the barracks. When is show time? 0600. How late do you stay? Usually until 1830 1900. Not uncommon for a 12 hour day. Yes sir.

How long have been doing 12 on 12 off. Seems like for awhile.

It seemed like every weekend. We usually got Sunday off.

Was there poor communication in the squadron prior to the mishap? Yes sir.

Between the shops and maint control. Between maint control and ops. Seemed like the word was not getting passed.

What frustrated you the most in the shop? It seemed like we get tasked out b/c we can't work on that job because flight line had priority and we couldn't work on it.

Up until the mishap how was the health of the aircraft? Not that good.

Is there a drug problem? Not sure.

Program manager for AVI? Battery safety (b)(6) (b) (3) 10 USC § 130[illegible]. Did well on the inspection.

What is the relationship with the junior officers? Never had any bad issues.

Where were you the night of the mishap. I was asleep. Range week.

ENCLOSURE (27)

Pages 448 through 790 redacted for the following reasons:
- -
NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT http://www.navsea.navy.mil/Contact/FOIA/

Summary of Interview with (b)(6) (b) (3) 10 USC § 130, U.S. Coast Guard Sector Honolutu

The USMC LNO went to the District HQ. On station by 1000.

Not sure who generated or thought of the LNO request.

The LNO term came up at Haliewa. They knew I had experience with the Blue Angels. I knew (b) (6) and let her know I was available. Personality based.

Is this the first time? We always send an LNO to the fire dept to coordinate. It's the standard build.

ICS planning piece. The USMC LNO was working through this.

I knew the key people in the key positions.

The MAG 24 watch bill was helpful to the folks at the ICP in the district. I primarily directed my attention to answering RFI's from the base.

I explained a lot of the processes to the USMC. NOK notification. Setting up the family briefs. Explaining the search efforts.

Basically a hybrid effort of USMC processes and USCG processes using the CACOs

Suspension brief was Tuesday. Delayed that for family notification.

Parallel chains of notification to chains of command. USMC and USCG. Both commandants were involved in this process.

Monday we were ready to call it. (6) (b) (3) 10 USC § 1 and (6) (b) (3) 10 USC § was making the calls to the NOK. They had to speak to all extended families. BG Sanborn requested to delay one more day for the suspension brief.

We have a deliberate process. You could feel a sense of urgency from the USMC..

I didn't have the CACO piece experience. Due to the nature of your work, I'd like to think it's a less emotional more business like process. We take the family from the incident to the conclusion. We have two daily briefs to the families on a normal case. Day two we start talking survivability. Day three we start looking at suspension. Two different models we look at based on the water temp.

Functional time is 52 hours. The model of the longest is 62 hours. Once we hit 72 we are heading toward discussions. We start shaping our suspension efforts with the families.

With 12 people the notification process is a herculean task. It's easier accomplished in a smaller group.

We just extended a search another 12 hours Queens Bath for the family. The Kauai search.

Cutters /small boats and c130. We threw everything at it we could quickly. We have a 30 minute asset allocation per our regulations.

ENCLOSURE (209)

Improvements: I would say the EOC could have been a better one stop shop. Should we have had all players there. Sometimes disjointed in the information piece. Draw all the major heavies to the EOC. I know a lot of the work being done would be at the MAG building. You need to have the common operating picture. If you have it use it.

Setting up the Unified Command: That's done by the District. That's what we do. Particularly for a large incident. We find who the senior service reps are. Then we build the unified command. This was a collaborative effort in this case.

Any party involved in the mishap is brought to the table in a unified front. \

The next morning we had a LT from my office at District. He was basically the LNO at Haliewa. He was tasked with tieing in with HPD HFD. (b)(6) (b) (3) 10 USC § 130. They stayed around for about 24 hours.

Command Objectives on the 209. They are revised as the situation changes. Basically a commander's intent.

Who talks to the FAA on the airspace. b)(6) (b) (3) 10 USC § 13 SAR coordination. We had one ship handling c2 and airspace control.

This was passed off to the USMC after the suspension on Tuesday.

This unit has institutionalized standing up a unified command and bridging gaps with other organizations.

Staffing: District, Command Post ICP, and USMC Base. No surprise in how this worked.

USCG requested the Paul Hamilton via message traffic through USMC to PACFLT.

ENCLOSURE (20)

TMS	Date	ASN	IR	OOR	RBA	MC	FMC	NMCM	NMCS
CH-53E Average	Jul-14	11	9.0	2.0	4.0	4.8	2.7	1.5	2.7
CH-53E Average	Aug-14	15	12.7	2.3	5.8	6.8	3.5	2.4	3.3
CH-53E Average	Sep-14	15	10.9	4.2	1.4	2.5	0.1	4.7	3.7
CH-53E Average	Oct-14	15	12.2	2.8	2.1	4.3	0	5.8	2.2
CH-53E Average	Nov-14	15	13	2	3.8	5.6	0.1	2.5	4.9
CH-53E Average	Dec-14	15	12	3	6.1	7.1	1.4	0.9	4
CH-53E Average	Jan-15	15	12	3	5.8	7.7	1.2	0.9	3.3
CH-53E Average	Feb-15	15	10.1	4.9	4.4	5.7	0.6	2.7	1.7
CH-53E Average	Mar-15	15	7.4	7.7	1.3	1.4	0	2.8	3.2
CH-53E Average	Apr-15	15	9	6	1.5	2	0.9	3	3.9
CH-53E Average	May-15	15	12	3	4.9	6.5	0.8	2.8	2.6
CH-53E Average	Jun-15	15	11.2	3.8	4.4	5.3	0.5	2.2	3.6
CH-53E Average	Jul-15	15	10.5	4.5	4.6	5	0.4	1.4	4.1
CH-53E Average	Aug-15	15	11.2	3.8	4.1	5.3	0.4	1.5	3.5
CH-53E Average	Sep-15	15	8.6	6.4	2.3	3.5	0.8	2.6	1.6
CH-53E Average	Oct-15	15	9.4	5.6	1.7	3.2	0.3	4.1	2
CH-53E Average	Nov-15	15	10.8	4.2	2.3	3.4	0.1	4.5	2.7
CH-53E Average	Dec-15	15	10.3	4.7	1.8	3.2	0.4	3.1	4
CH-53E Average	Jan-16	*14.8	7.6	7.2	1.8	3.3	0.1	4.2	0.2
CH-53E Average	Feb-16	13	7.3	5.7	3.7	4.7	0	1.5	1
CH-53E Average	Mar-16	13	9.7	3.3	3.8	4.3	0	1.6	3.8
CH-53E Average	Apr-16	13	10.9	2.1	4	5	1	2.4	3.4

All indicated values are monthly averages.

ASN	Assigned Aircraft
IR	In Reporting Aircraft
OOR	Out Of Reporting Aircraft
RBA	Ready Basic Aircraft
MC	Mission Capable Aircraft
FMC	Full Mission Capable Aircraft
NMCM	Non Mission Capable Maintenance Aircraft
NMCS	Non Mission Capable Supply Aircraft

NAE Current Readiness 1st MAW ALD

(b) (5), (b)(6) (b) (3) 10 USC § 130b



(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

(b) (5), (b)(6) (b) (3) 10 USC § 130b

Summary of Interview

(b)(6) (b) (3) 10 USC § 130b

13 March 2016

In the Marines for 20 years, MMCO for 5 years. Came to MALS-24 on 30 June 2015 to be power plants officer. Not slated to go to HMH-463. However, was sent over to HMH-463 from MALS-24 on 19 October 2015. I was also over there on 1-2 October to see what was going on.

I took over for (b) (3) 10 USC

Wing inspection 463 was at the same time as CNAF at MALS. Detected that changes should be made. Oct 1 checked in. (b)(6) (b) (3) 10 USC § 1 and (6) (b) (3) 10 USC § spoke with him.

As power plants officer, he went to the high priority meetings. July through the inspection. (b) (3) 10 USC would show up unprepared for those meetings. Not ready to discuss what was on the AMSRR. Need to have the answers of why you need the part and will the a/c be up when the part is mentioned. No one held (3) 10 accountable for showing up unprepared for the high priority meeting.

High cannibalization rate attributed to MRF-D, which was a four aircraft det. Lots of parts taken off a/c here to support MRF-D. HMH-463 cannibalized parts from Kaneohe Bay aircraft, shipped them, and ordered parts through the parts supply system from Australia as well.

Was told (b) (3) 10 USC didn't have a good relationship with QA. They didn't trust him. MMCO and QA had a toxic relationship. QA didn't like the MMCO talking to the engineers. Lots of noninvolvement from SNCOs. Not out in the line.

Arrived when (b)(6) (b) (3) 10 USC § 130 was running it. (b)(6), (b)(3) spoke to (b) (3) 10 US , (b)(6), (b)(3) about the SNCO involvement on the line. (b)(6), (b)(3) was frustrated with them. Made some moves to put the right people in the right positions.

His solution was to have a dedicated weekend crew. Several CDI's and CDQ's working dedicated weekends. Got push back from SNCOs and OICs of divisions.

(b)(6) (b) (3) 10 USC § 130b lost confidence in the SNCOs where he and (b)(6) (b) (3) 10 USC § 13 had to dig down and ask pointed questions. After MRF-D 2015, four aircraft came back. One took out of reporting (to mod), one to IMC (intermediate maintenance), two built up. Kept a dedicated det together following MRF-D.

(b)(6) (b) (3) 10 USC § 130 did not want to work the weekends. He was there for about a month and (b)(6), (b)(3) took over. Six RBA was the goal. We noticed safety issues with how they were working on the aircraft. You need SNCOs out there supervising. The safety issues were things like Marines standing on tool boxes instead of checking out a stand to perform work, not wearing their cranials correctly when aircraft were turning and burning. A couple times, (b)(6), (b)(3) and I were walking around and noticed that the Marines did not have the publications directly out in front of the Marines working on the aircraft. Even though none of these were big issues, these small safety issue still concerned me.

If you were going to exceed 10 hours had to be approved by the AMO. Twelve should be approved by the CO. The CO was definitely not going to take anyone's holidays away. He was in meetings with MAG CO, squadron CO, and AMO at the MA.

Was very surprised about the CO's relief. Told the AMO that the SNCOs had not bought in to what had happened. Figuratively he was kicking down doors. Sent him the AMSRR while on leave. Before he went on leave we had talked about making some moves in personnel. (b)(6) (b) (3) 10 USC § 1 came to MC, (b) (3) 10 USC came to flight line.

(b)(6) (b) (3) 10 USC § 130b CO looking for a place for him at the MAG. Made him an assistant to (b) (3) 10 USC on phase crew. Wing ALD would call in the afternoon. Okinawa morning timeframe.

All they can really help with is parts. The class desk can find alternate parts numbers. (3) 10 would call and ask about work arounds and an alternate NIN. They would reach out and help. He viewed this as a positive thing. Primarily the help he could provide was parts and IMRL.

Both (b)(6) (b) (3) 10 USC § 130b and (b)(6), (b)(3) did not want to work weekends.

In fall 2015, issues with tail rotor disconnect took two out of the fight. MALS 101 days of maintenance was a good opportunity to discuss internally where the friction points were. In January 2016, we invited more SNCOs, OICs, QA.

(b)(6), (b)(3) told me about the rumor that maintenance Marines were downing aircraft. That was why he was making the personnel moves within maintenance. (b)(6) (b) (3) 10 USC § 1 in FL and (b)(6) (b) (3) 10 USC § 13 in FL. A pilot heard them talking about how many downers they could find. Would put (b) (3) 10 US in MC and (b)(6) (b) (3) 10 USC § 130b in FL. (b)(6) (b) (3) 10 USC § 130b had dropped his pack in FL and was going to move him to phase. (b) (3) 10 US was in MC for one day then the mishap happened. Moved him back to the line. (b) (3) 10 US attributed it to rumors.

In fall 2015, the squadron maintenance night crew did not call MALS-24 when they found an aircraft part that was potentially out of limits—the mixing unit. The night crew did not notify MALS-24 before pulling the part, which downed the aircraft and caused a ton more work. This could have been handled much easier. A MALS-24 expert could have come over, looked at it, and quickly fixed it. Instead, they pulled the part.

(b)(6), (b)(3) was a big family man. It was tough for him to take people away from their families.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

ORDER
JO 7110.65W

Effective Date:
December 10, 2015

SUBJ: Air Traffic Control

This order prescribes air traffic control procedures and phraseology for use by personnel providing air traffic control services. Controllers are required to be familiar with the provisions of this order that pertain to their operational responsibilities and to exercise their best judgment if they encounter situations not covered by it.

(b) (6)

Date: OCT 27 2015

Section 3. Overdue Aircraft

10-3-1. OVERDUE AIRCRAFT/OTHER SITUATIONS

a. Consider an aircraft to be overdue and initiate the procedures stated in this section to issue an ALNOT when neither communications nor radar contact can be established and 30 minutes have passed since:

***NOTE**–The procedures in this section also apply to an aircraft referred to as "missing" or "unreported."*

1. Its ETA over a specified or compulsory reporting point or at a clearance limit in your area.

2. Its clearance void time.

3. A VFR or IFR aircraft arriving at an airport not served by an air traffic control tower or flight service station fails to cancel a flight plan after receiving instructions on how to cancel.

***NOTE**–If you have reason to believe that an aircraft is overdue prior to 30 minutes, take the appropriate action immediately.*

b. Consider an aircraft to be in an emergency status and initiate ALNOT procedures in this section immediately when there is an abnormal simultaneous loss of radar and communications with an IFR aircraft or VFR/SVFR aircraft receiving flight following services. This situation may be applicable to an

ENCLOSURE (2)

aircraft operating in a non-radar environment and an unexpected/abnormal loss of communications occurs.

c. The ARTCC in whose area the aircraft is reported as overdue, missing or lost will make these determinations and takes any subsequent action required.

d. If you have reason to believe that an aircraft is overdue prior to 30 minutes, take the appropriate action immediately.

e. The center in whose area the aircraft is first unreported or overdue will make these determinations and takes any subsequent action required.

REFERENCE– *FAAO JO 7110.65, Para 4–3–4, Departure Restrictions, Clearance Void Times, Hold for Release, and Release Times.*

10–3–2. INFORMATION TO BE FORWARDED TO ARTCC TERMINAL

When an aircraft is considered to be in emergency status that may require SAR procedures, or an IFR aircraft is overdue, the terminal facility must alert the appropriate ARTCC and forward the following information, as available:

a. Flight plan, including color of aircraft, if known.

b. Time of last transmission received, by whom, and frequency used.

c. Last position report and how determined.

d. Aircraft beacon code.

e. Number of persons on board.

f. Fuel status.

g. Facility working aircraft and frequency.

h. Last known position, how determined, time, estimated present position, and maximum range off light of the aircraft based on remaining fuel and airspeed.

i. Position of other aircraft near aircraft's route of flight, when requested.

j. Whether or not an ELT signal has been heard or reported in the vicinity of the last known position.

k. Other pertinent information.

REFERENCE– *FAAO JO 7110.65, Para 10–1–4, Responsibility. FAAO JO 7110.65, Para 10–2–5, Emergency Situations.*

NOTE– *FSSs serve as the central points for collecting and disseminating information on an overdue or missing aircraft which is not on an IFR flight plan. Non–FSS ATC facilities that receive telephone calls or other inquiries regarding these flights must refer these calls and inquiries to the appropriate AFSS/FSS.*

ENCLOSURE( )

Pages 820 through 822 redacted for the following reasons:
- -
NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT http://www.navsea.navy.mil/Contact/FOIA/

5 April 2016

(b) (5)

(b) (5)

(b) (5)

(b) (5)

(b) (5)

ENCLOSURE ( )
(217)

OPERATION IRENE

14 JANUARY 2016



OBJECTIVE: TACTICAL WITHDRAWL

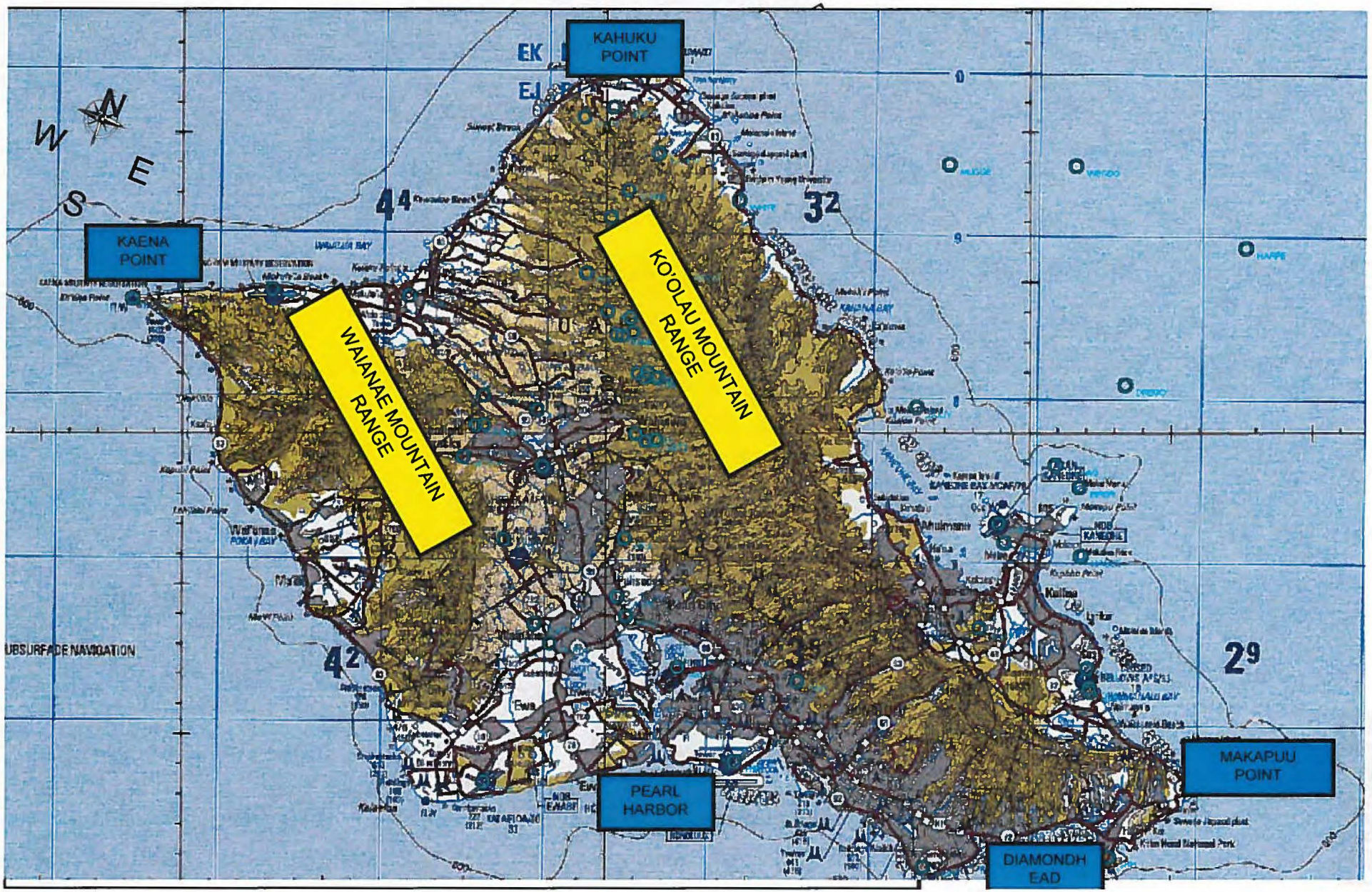
AREA OF OPERATIONS: OAHU / TFTA

CHATTERMARK: BLACK / SILVER / GOLD

PS 31

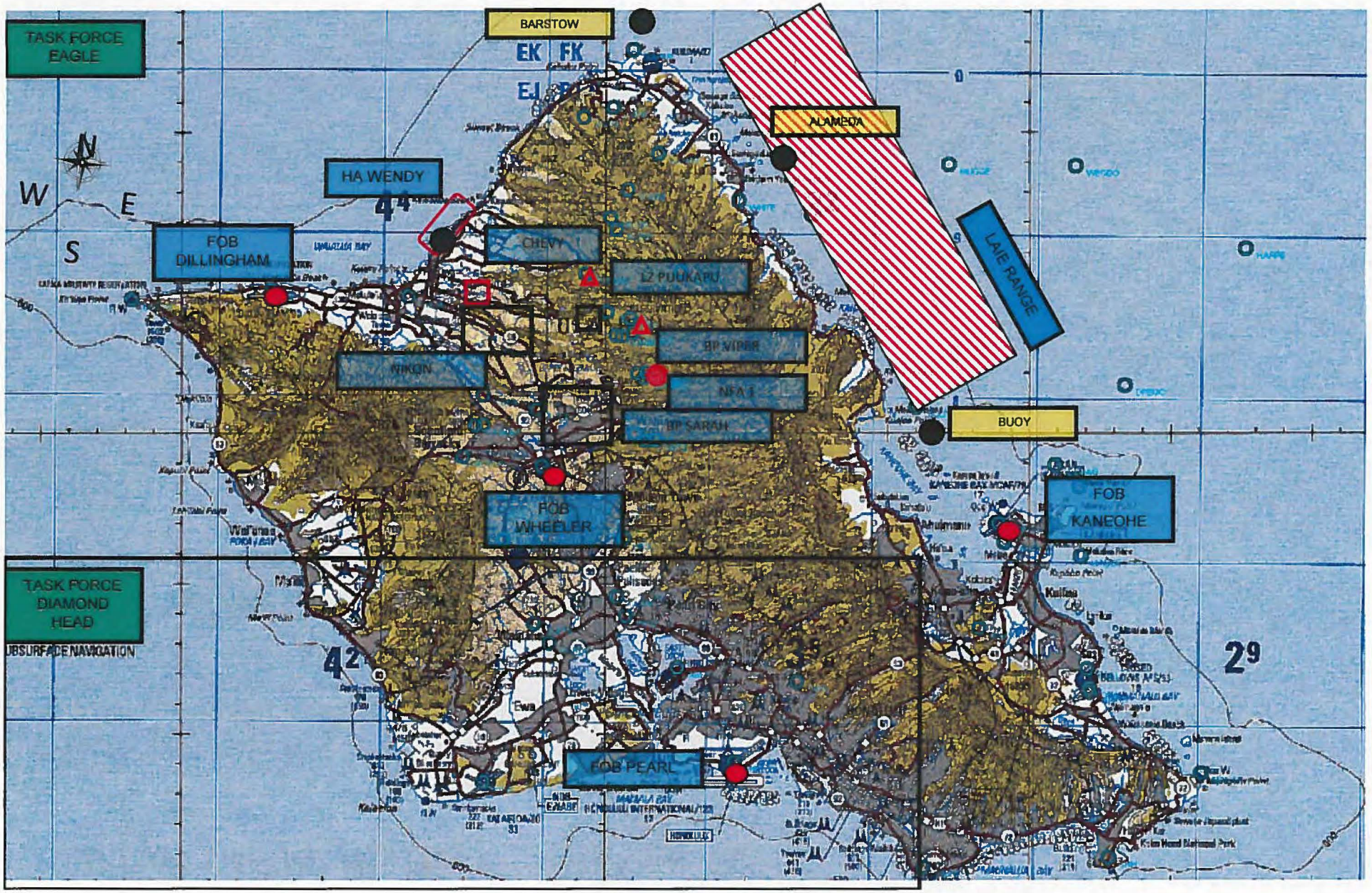
PS 32: (b)(6), (b)(3)

ORIENTATION



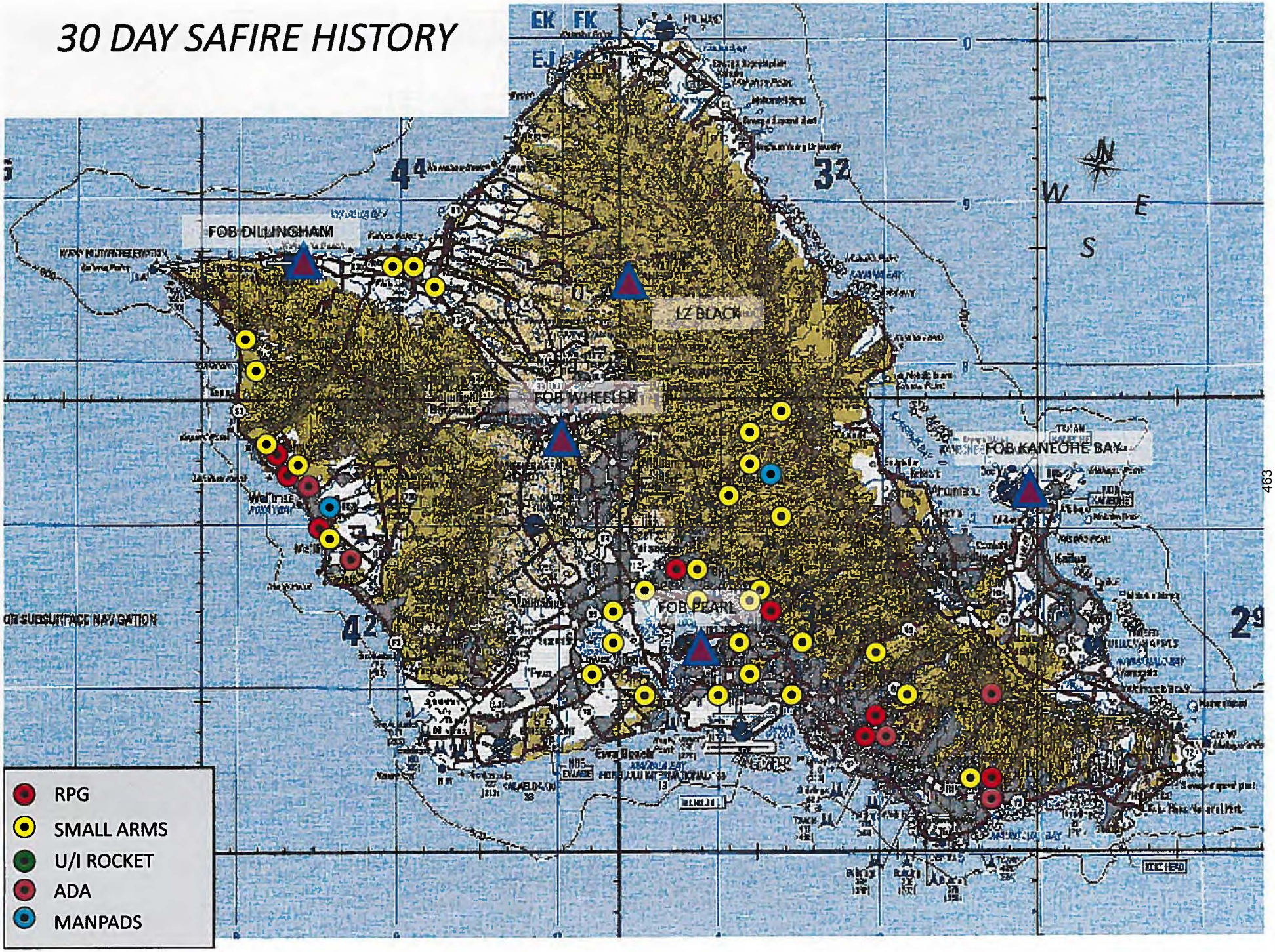
461

ORIENTATION

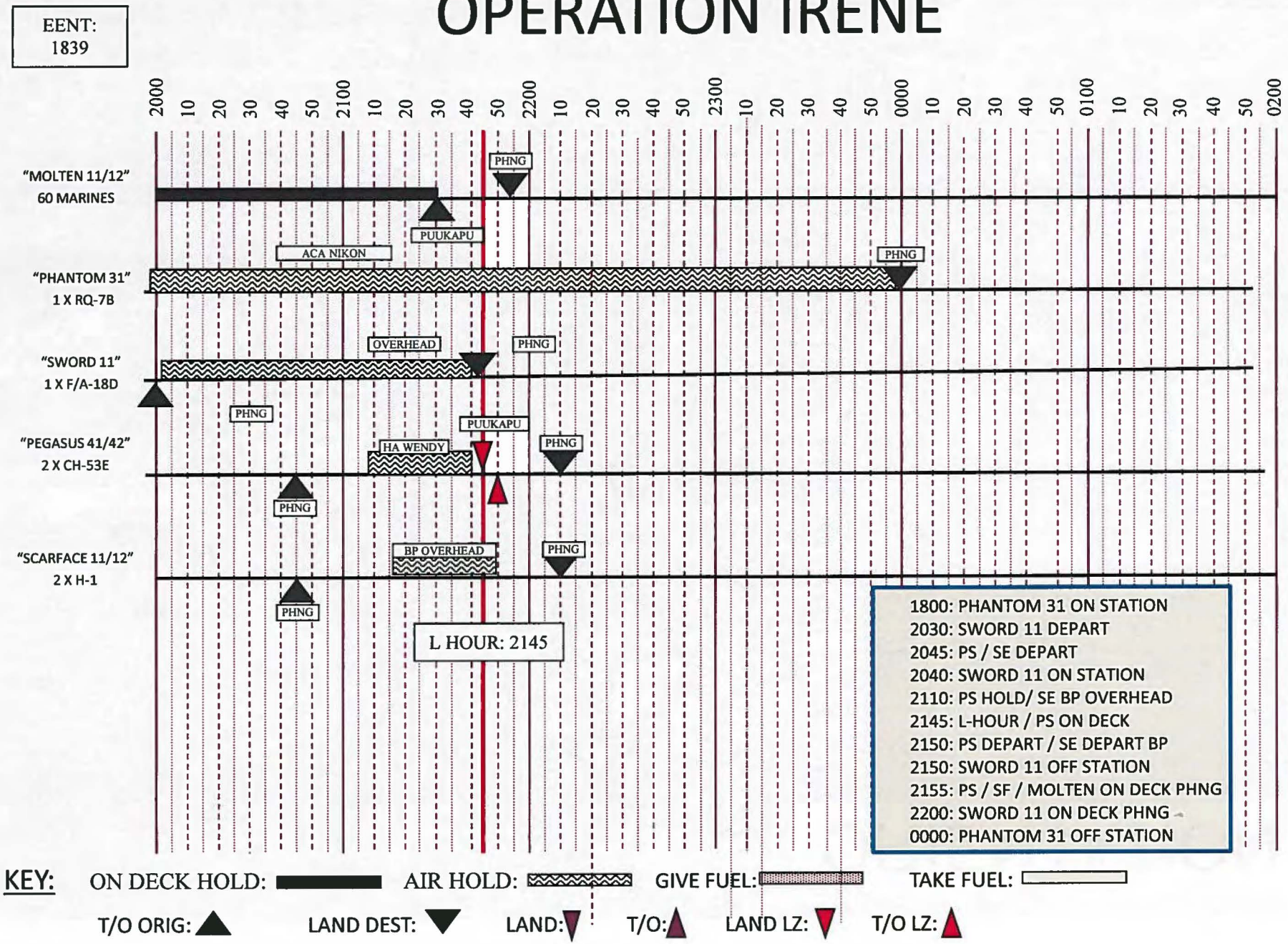


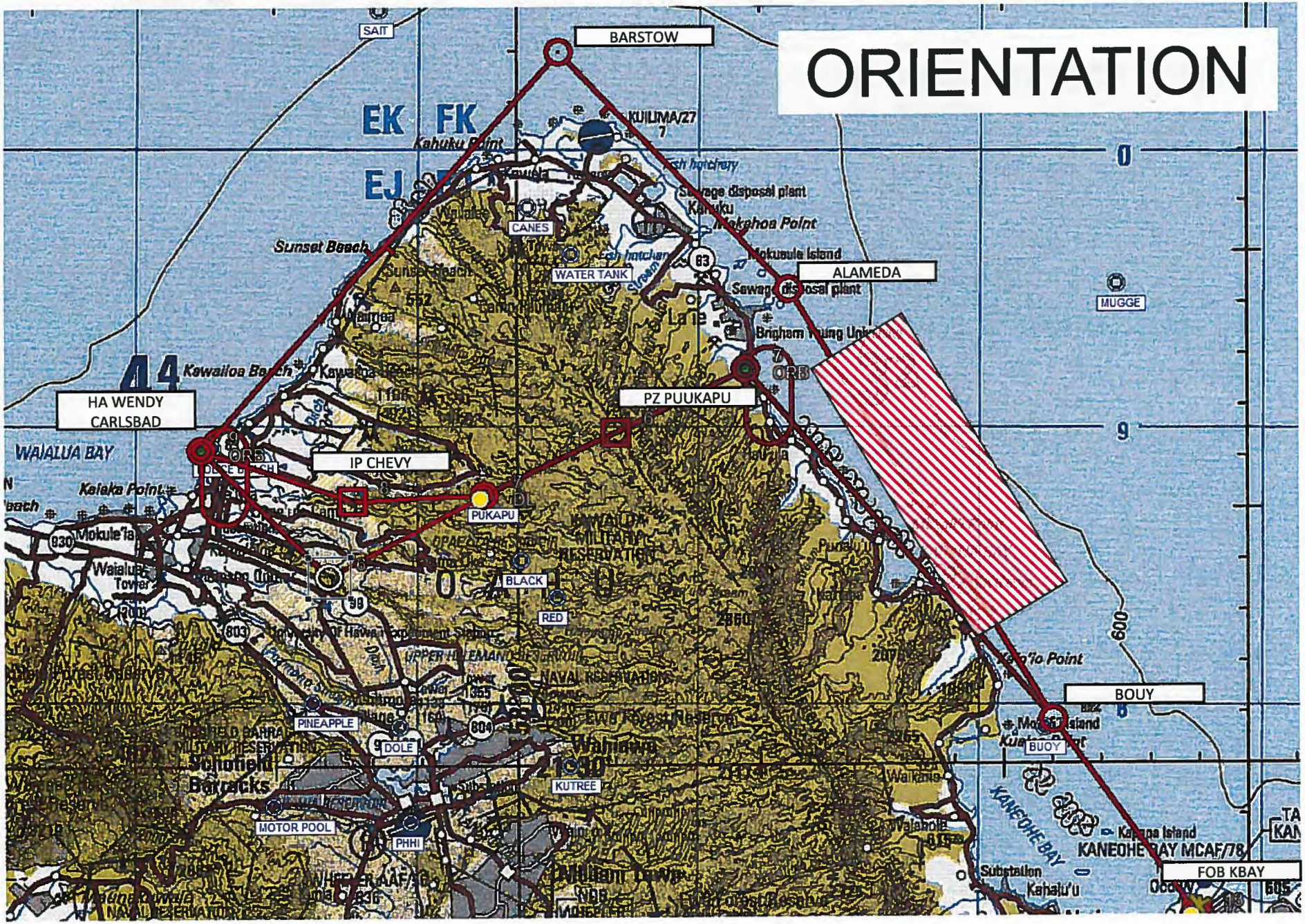
462

30 DAY SAFIRE HISTORY



OPERATION IRENE

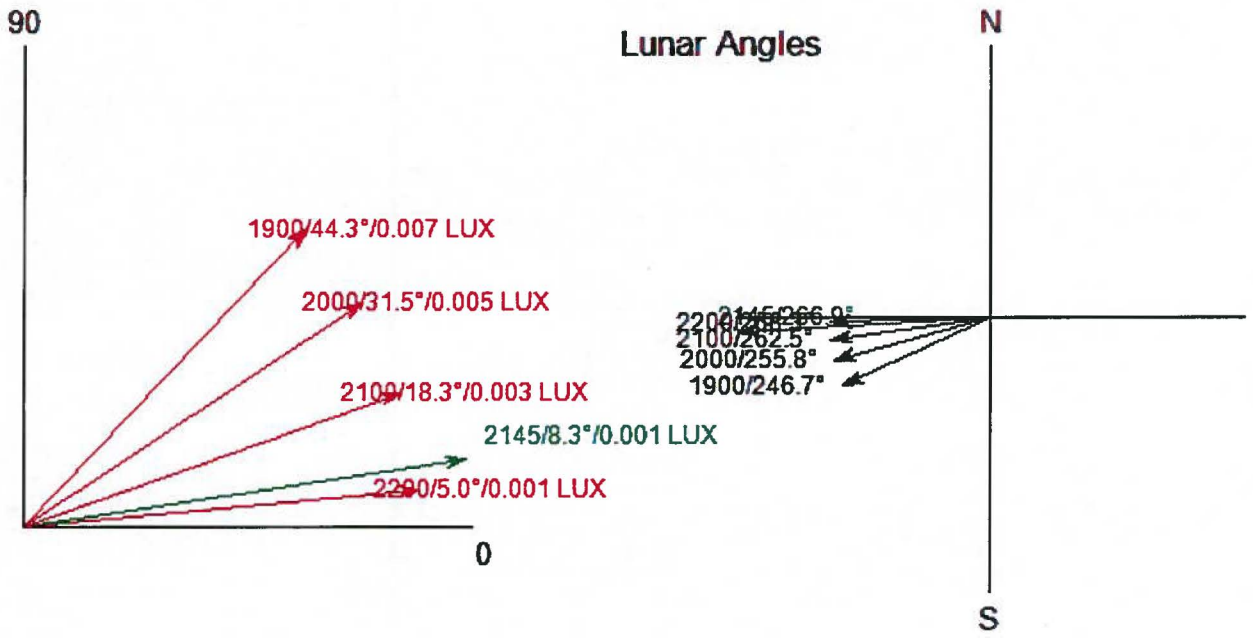



ORIENTATION
BARSTOW
ALAMEDA
HA WENDY
CARLSBAD
IP CHEVY
PZ PUUKAPU
PUKAPU
BLACK
RED
BOUY
BUOY
FOB KBAY
SAIT
CANES
WATER TANK
MUGGE
PINEAPPLE
DOLE
KUTREE
MOTOR POOL
PHHI
WAIALUA BAY
Sunset Beach
Kawailoa Beach
Kaiaka Point
Mokule'ia
Waialua Tower
Kahuku Point
Makahoa Point
Mokuaula Island
Sewage disposal plant
Brigham Young Univ
Kaio'io Point
KANEOHE BAY MCAF/78
Kahalu'u
Substation
Schofield Barracks
Wahiawa
Ewa Forest Reserve
KUILIMA/27
EK
FK
EJ
44
0
9
600

(b) (2)

(b) (2)

14 JAN 16 SLAP

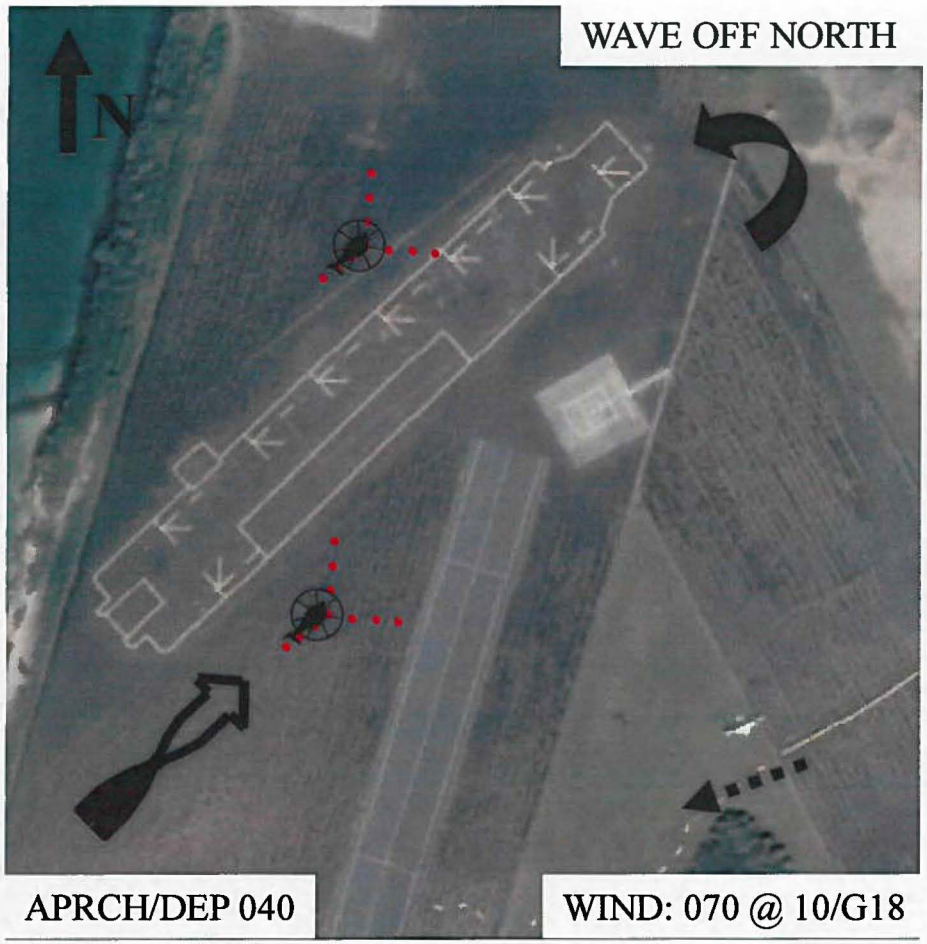


Location: SUMODataPoint-29
Latitude: N 21 35.217
Longitude: W 158 00.775
Date: 14 January 2016
Time Offset: -1000

BMNT: 0621
Sunrise: 0713
Moonrise: 1048
Sunset: 1810
EENT: 1901
Moonset: 2311

Time	ALT	AZ	LUX
2145	8	266	0.001
1900	44	246	0.007
2000	31	255	0.005
2100	18	262	0.002
2200	5	268	0.001

Rising Moon
Falling Moon
Time on Target



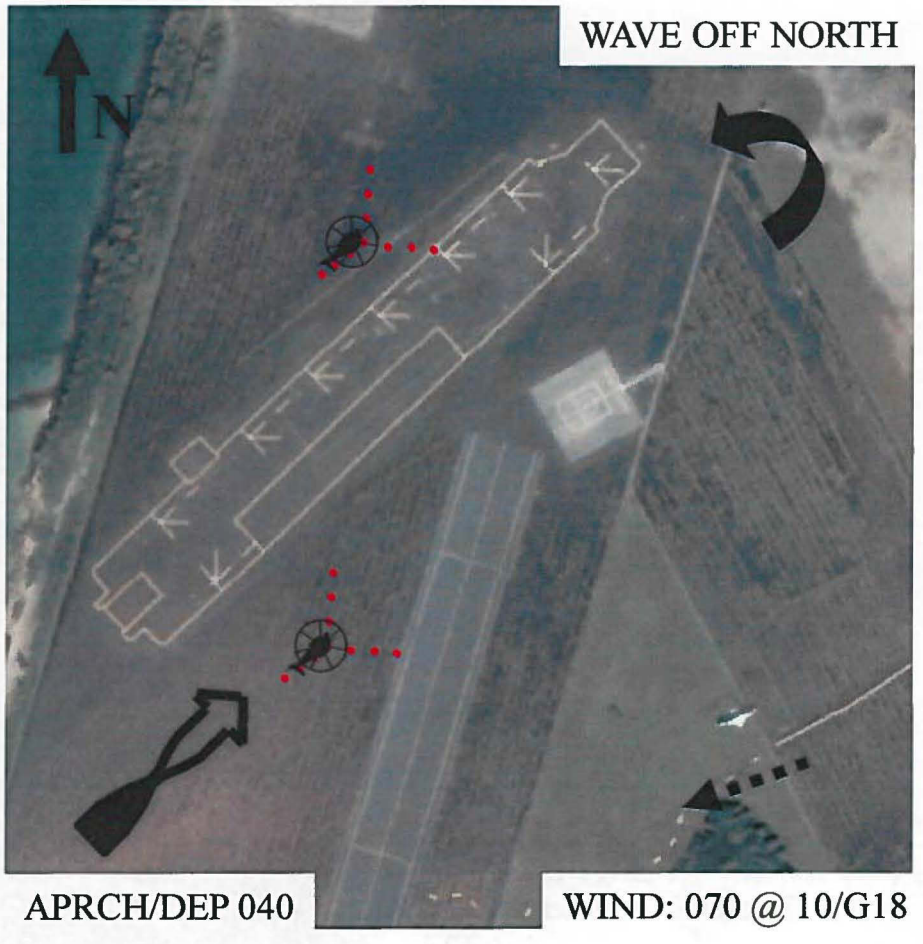
(b) (2)

FREQS:

(b) (2)

ELEV: 7'
DESCRIPTION: PAINTED LHA PAD, ASPHALT
OBSTACLES: BEACH ON APPCH, BUILDING TO N
SOP PATTERN: 300' AGL LEFT TURNS

LZ Westfield



(b) (2)

FREQS:

(b) (2)

ELEV: 7'
DESCRIPTION: PAINTED LHA PAD, ASPHALT
OBSTACLES: BEACH ON APPCH, BUILDING TO N
SOP PATTERN: 300' AGL LEFT TURNS

LZ Westfield



(b) (2)

FREQS: (b) (2)
ELEV: 7'
DESCRIPTION: PAINTED LHA PAD, ASPHALT
OBSTACLES: BEACH ON APPCH, BUILDING TO N
SOP PATTERN: 300' AGL LEFT TURNS

LZ Westfield



CH-53E Current Readiness Team Meeting

17 December 2015

472

ENCLOSURE (218)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b) (6)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)



(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

(b) (6)

(b)(6) (b) (3) 10 USC § 130b, (b) (5), (b) (2)

MARFORPAC ACD

ENCLOSURE (2)(a)

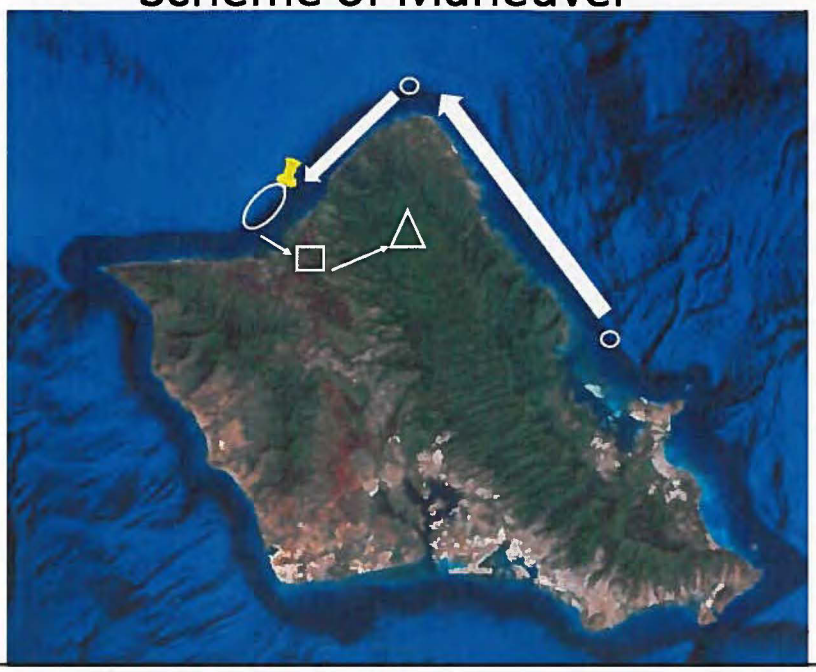
MFP

FY	Bud HRS	BCPH	Executed HRS	ECPH	Delta Executed HRS - Bud HRS	Delta ECPH - BCPH
9	14904	$ 10,407.60	15339	$ 10,915.31	435	$ 507.71
10	14851	$ 9,257.43	18093	$ 11,323.99	3242	$ 2,066.56
11	11984	$ 11,713.97	12395	$ 15,774.26	411	$ 4,060.29
12	12155	$ 10,614.64	15871	$ 12,241.49	3716	$ 1,626.85
13	17117	$ 12,891.12	17135	$ 12,613.56	18	$ (277.56)
14	13400	$ 13,844.27	15275	$ 13,315.38	1875	$ (528.89)
15	16902	$ 13,665.88	9500	$ 20,849.57	-7402	$ 7,183.69
16	15304	$ 15,783.61				

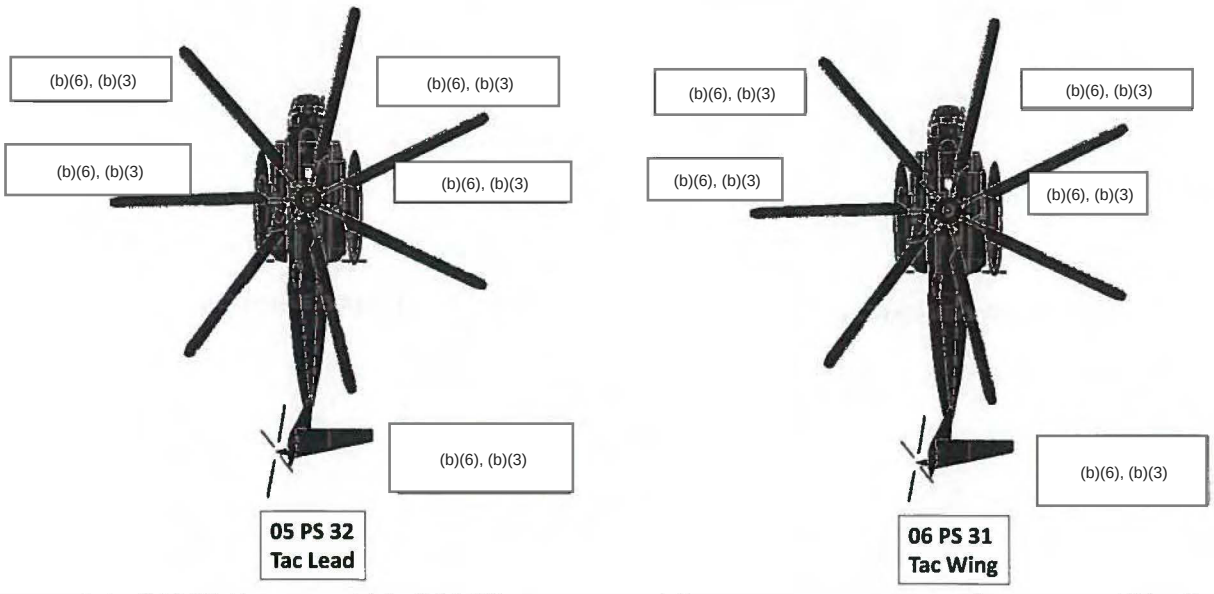
***MFP has was never denied fiscal resources to support CH-53E execution.

IO CREATED MISHAP STORYBOARD

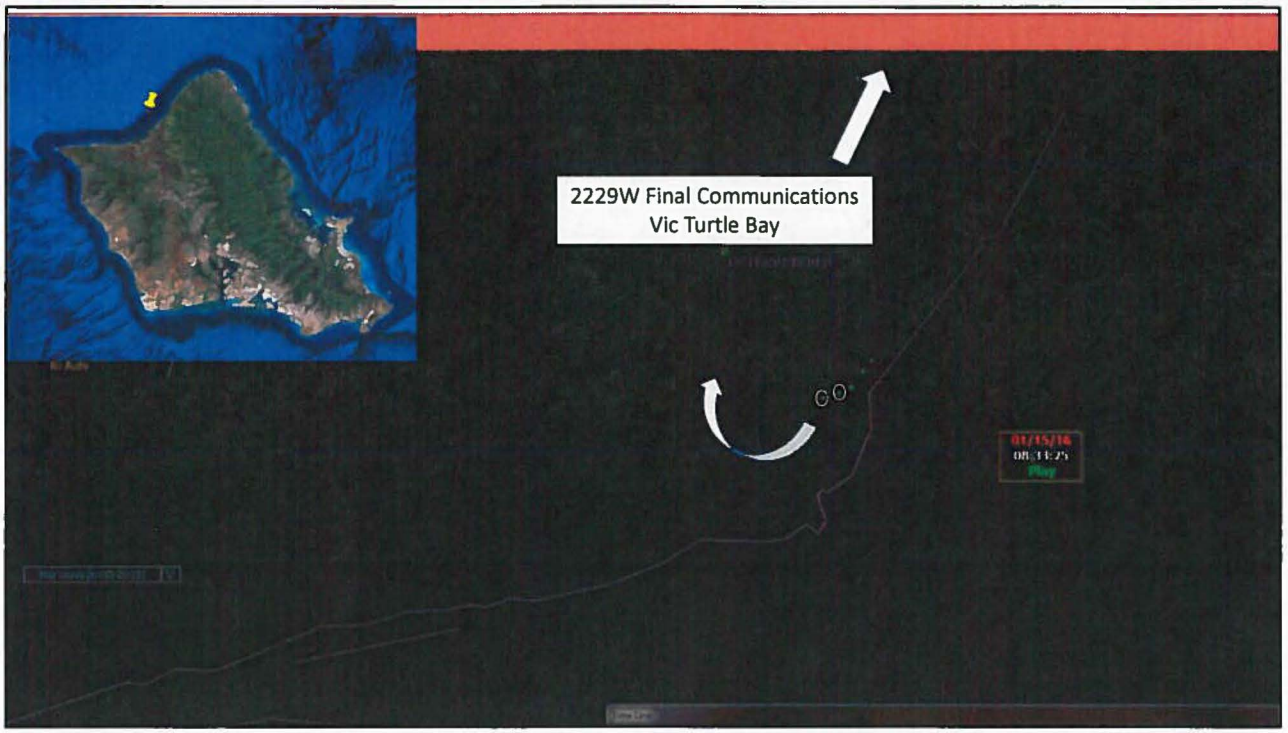
Scheme of Maneuver

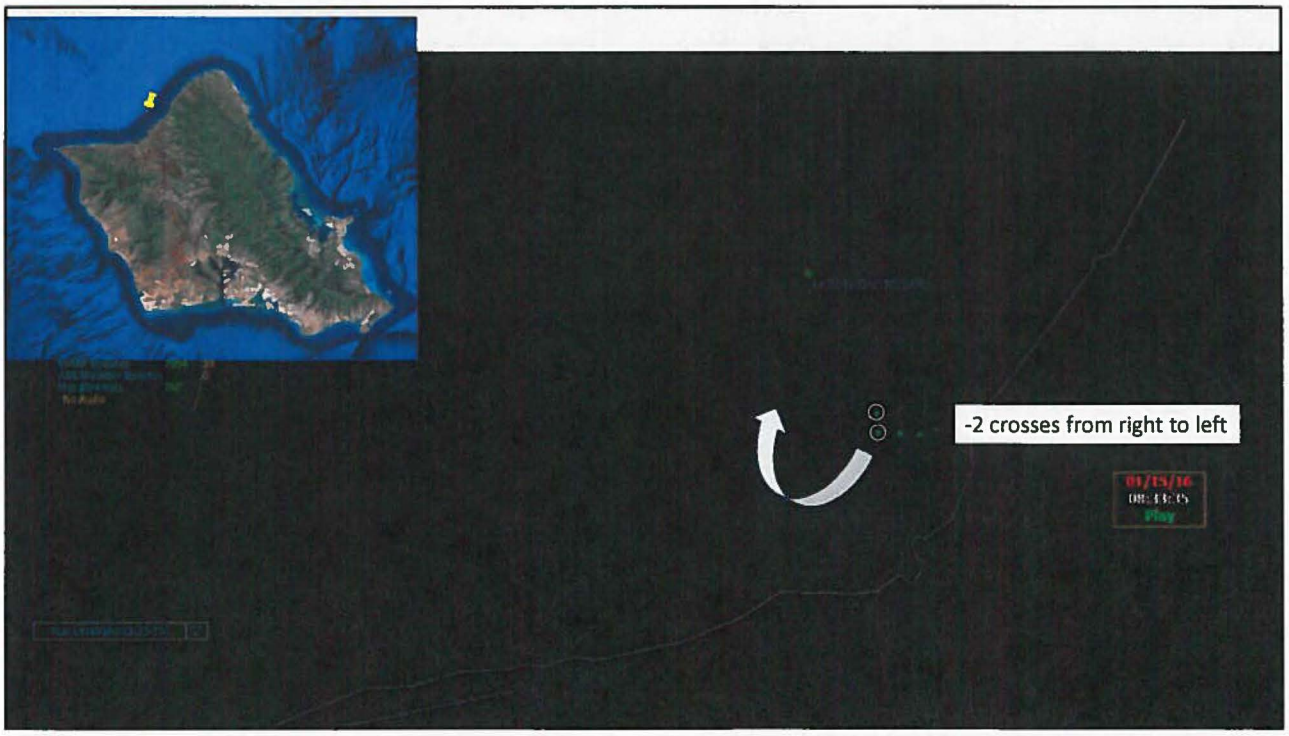


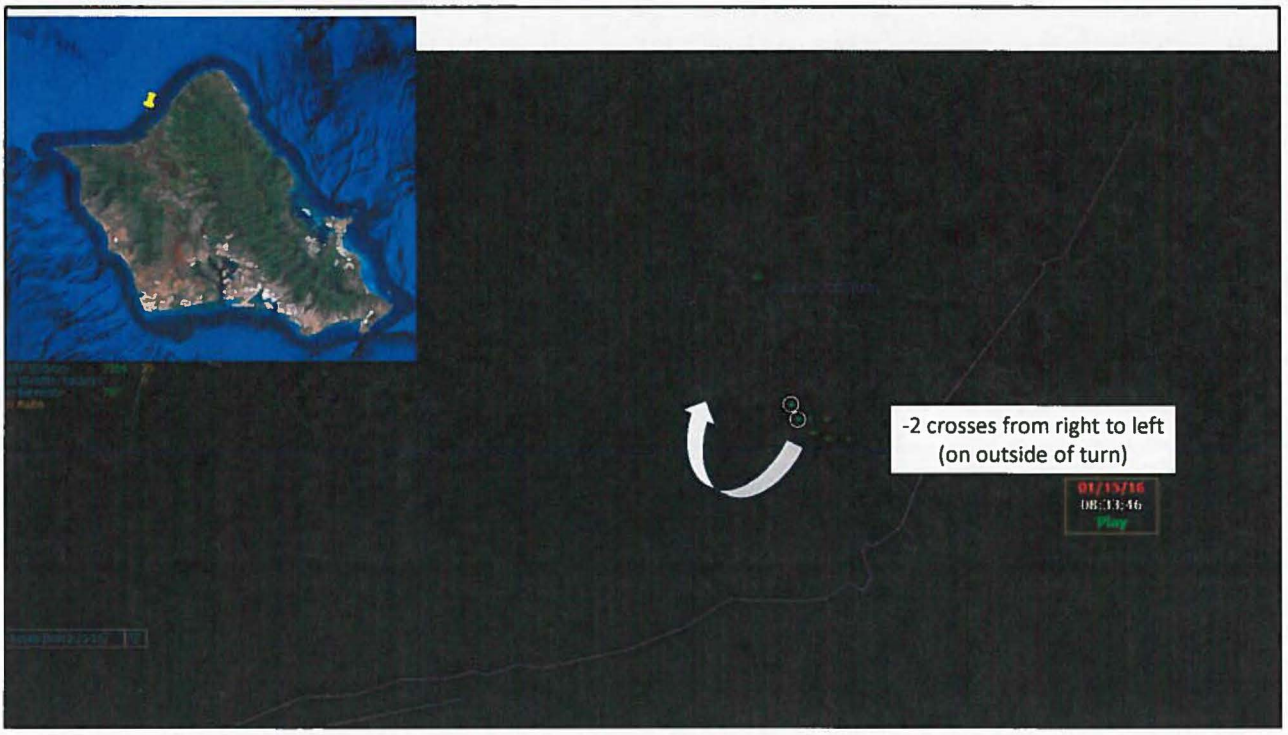
Crew Positions

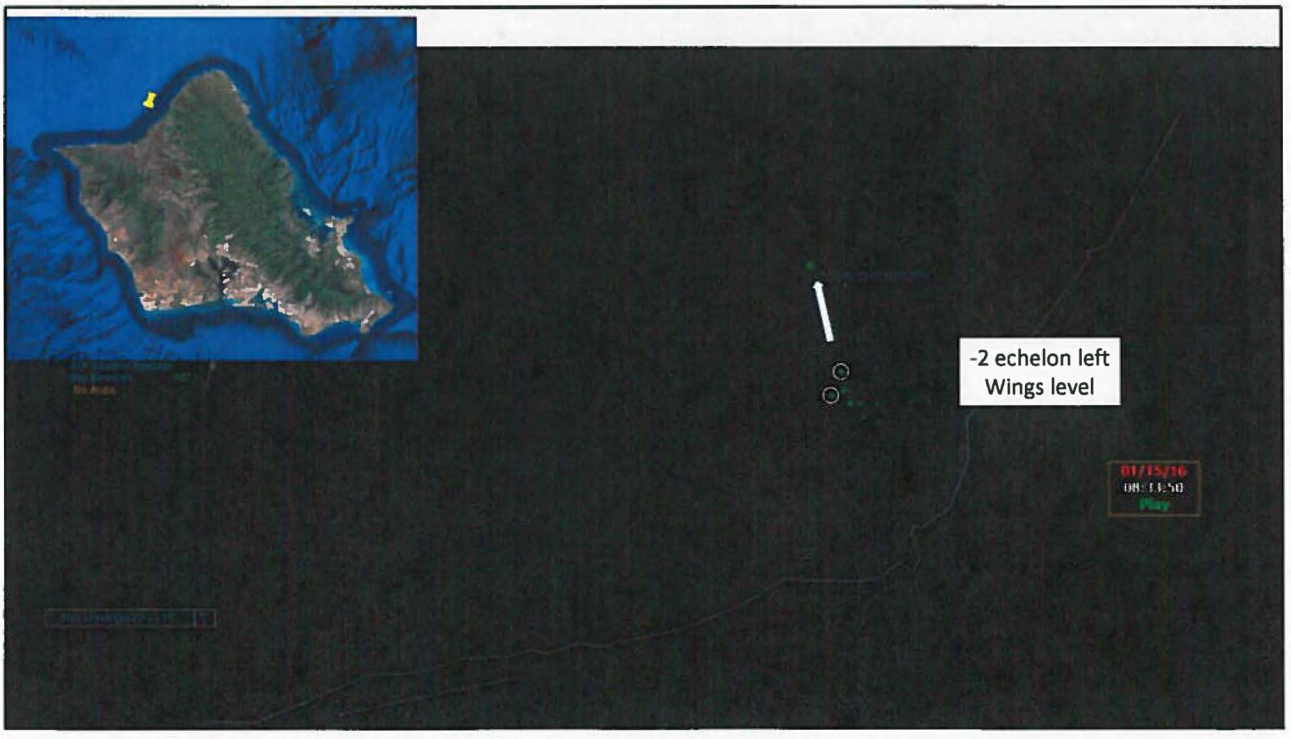


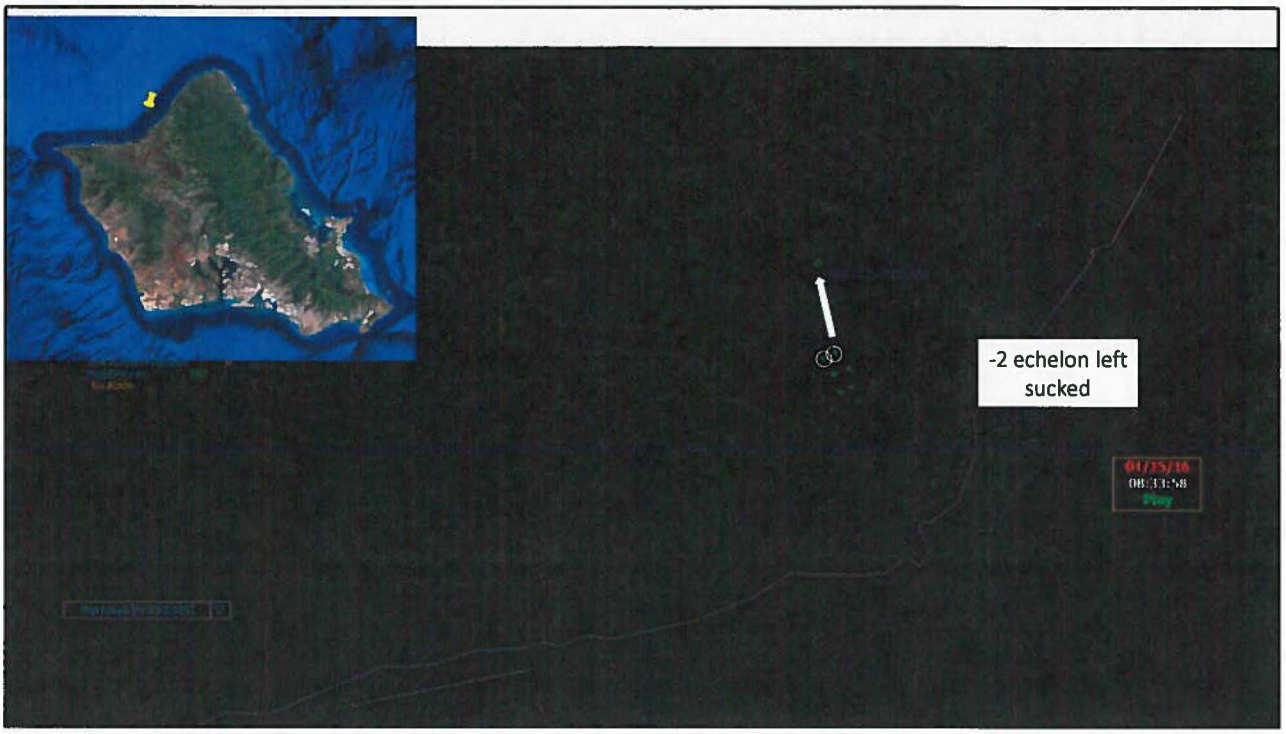
ENCLOSURE (220)

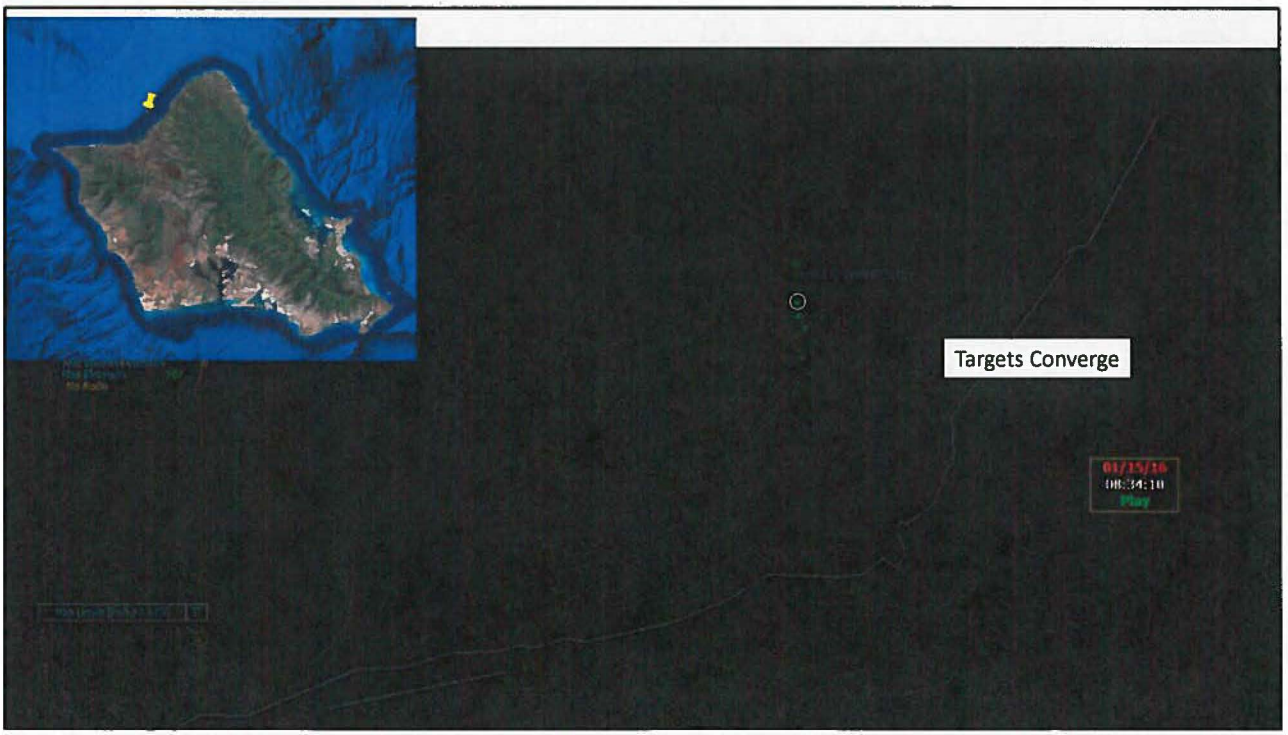

2229W Final Communications
Vic Turtle Bay

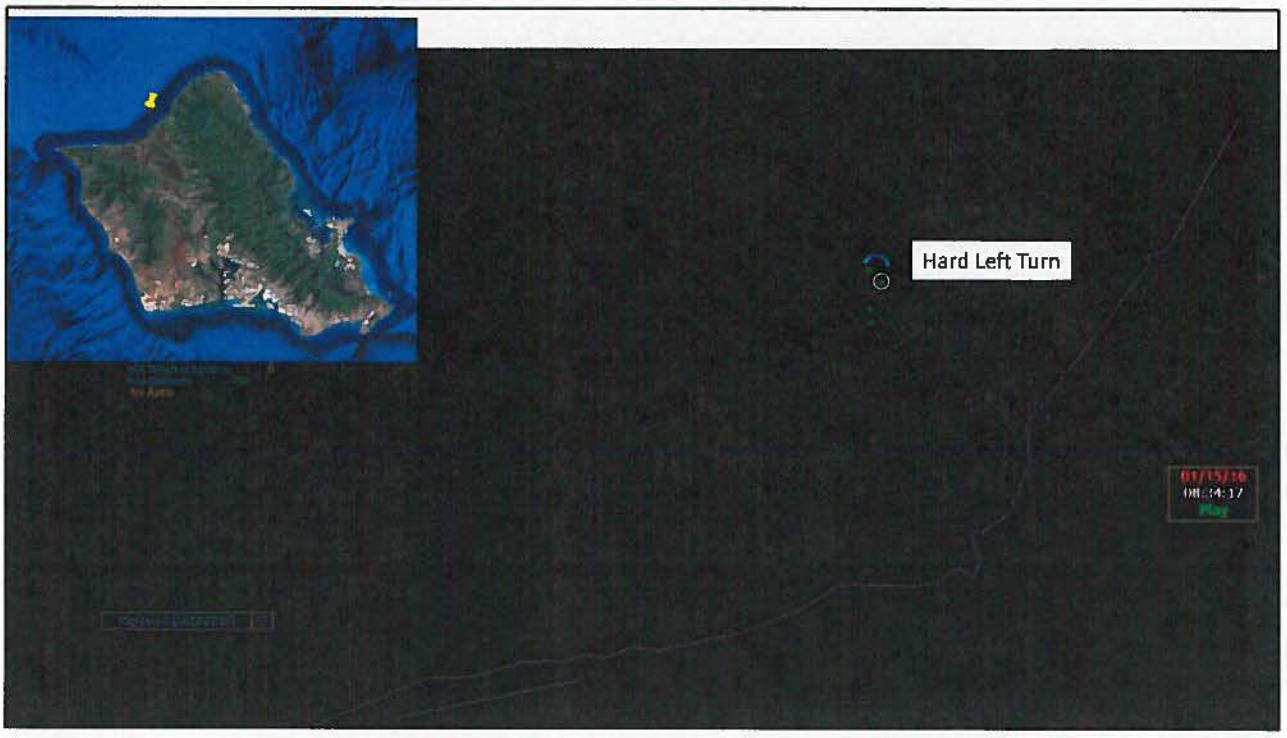

-2 crosses from right to left

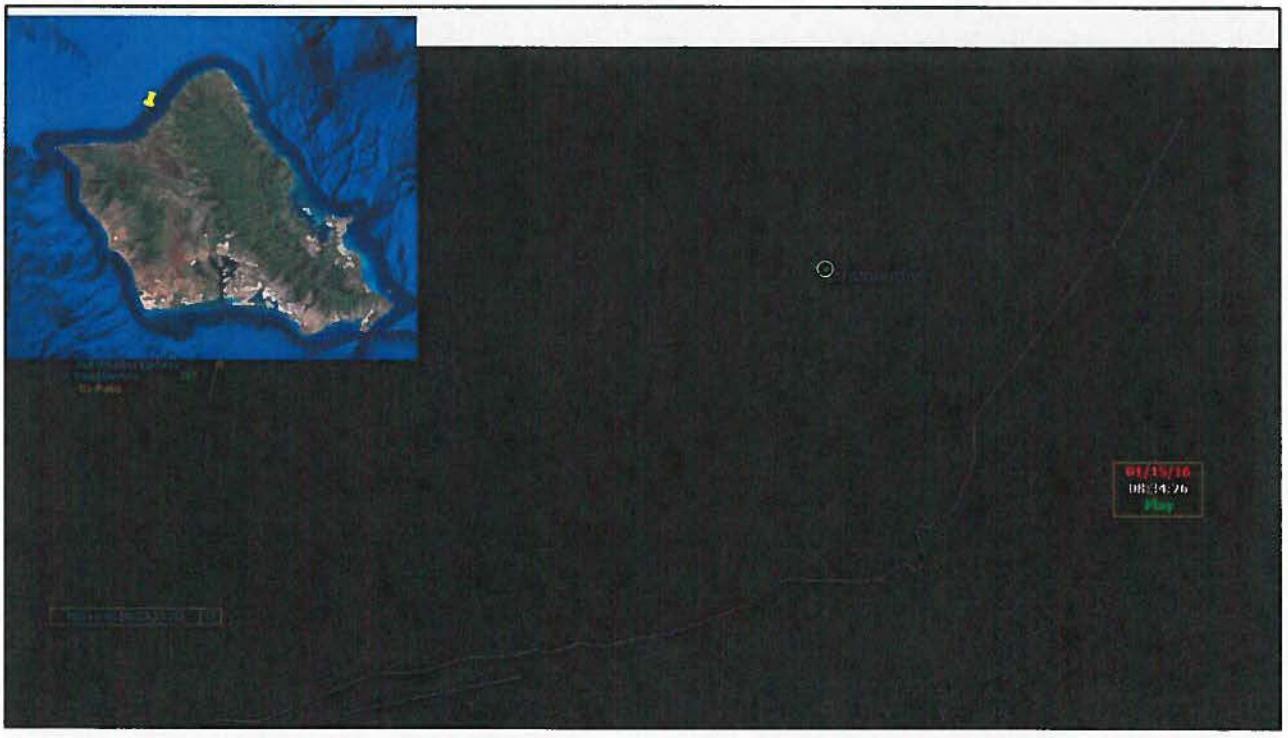

-2 crosses from right to left
(on outside of turn)

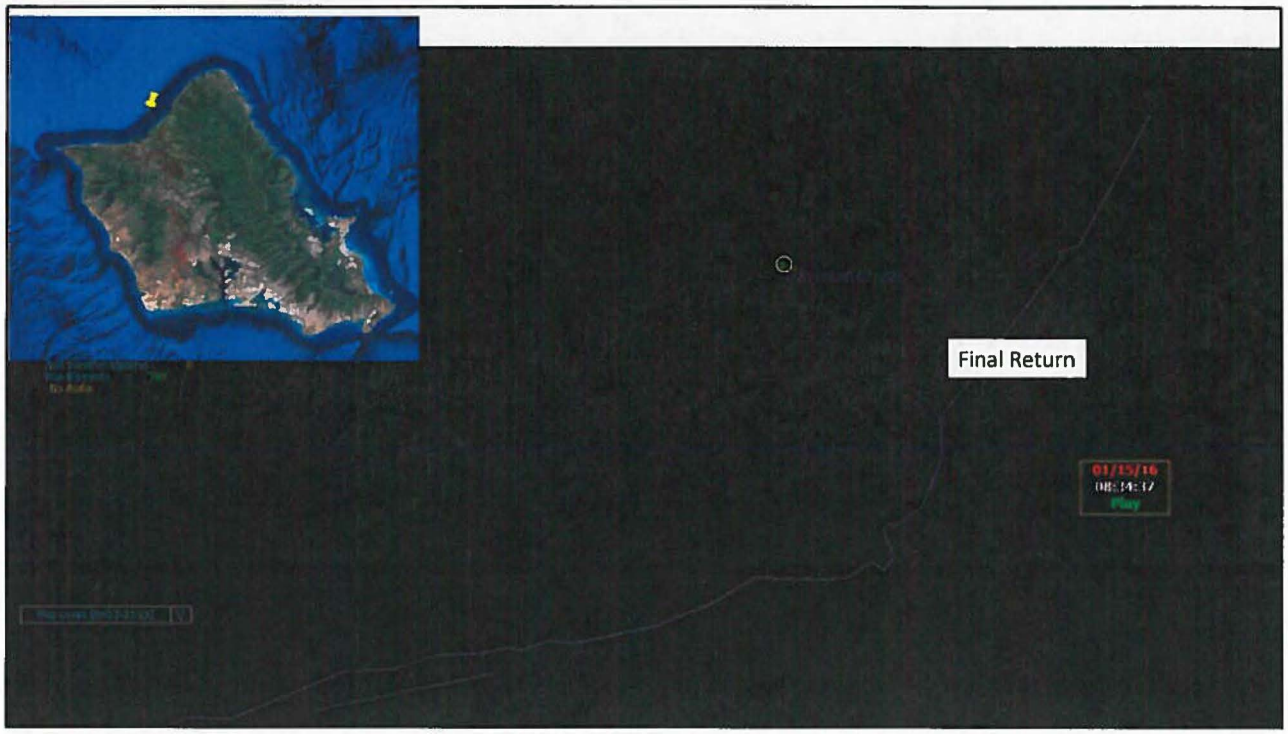

-2 echelon left
Wings level

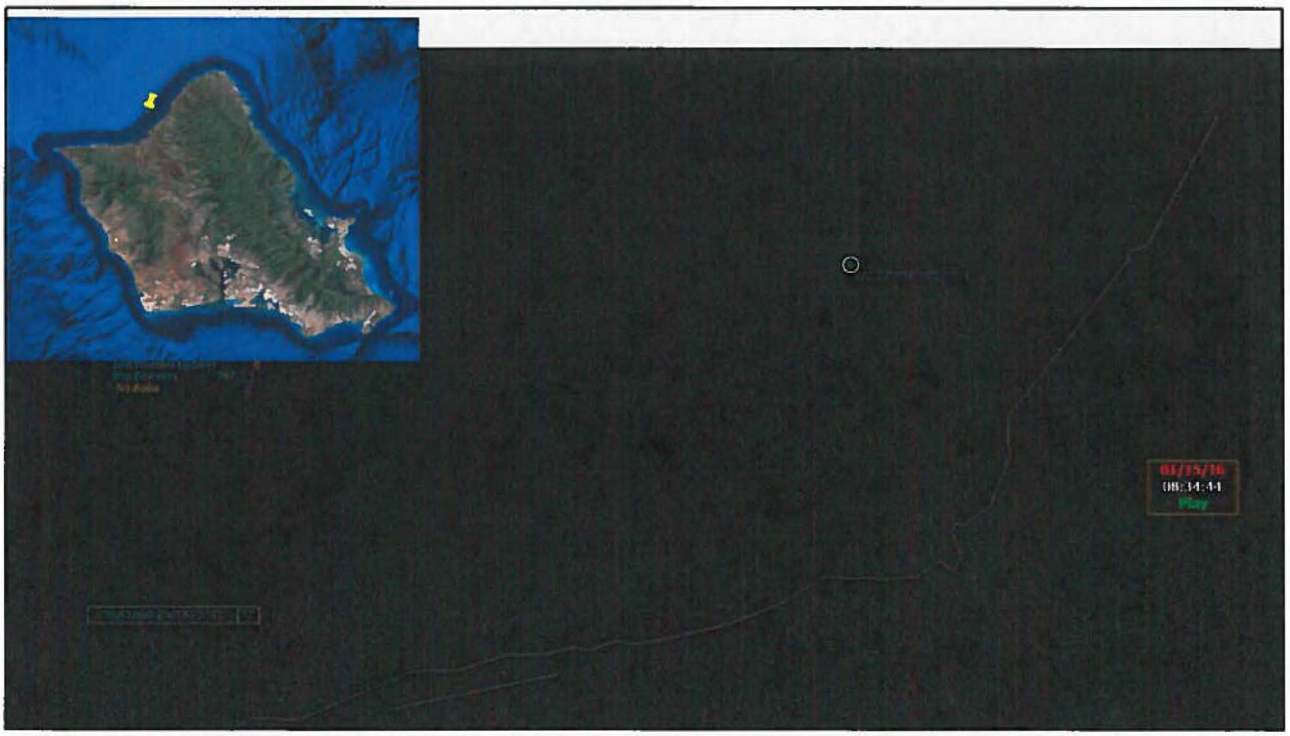

-2 echelon left sucked

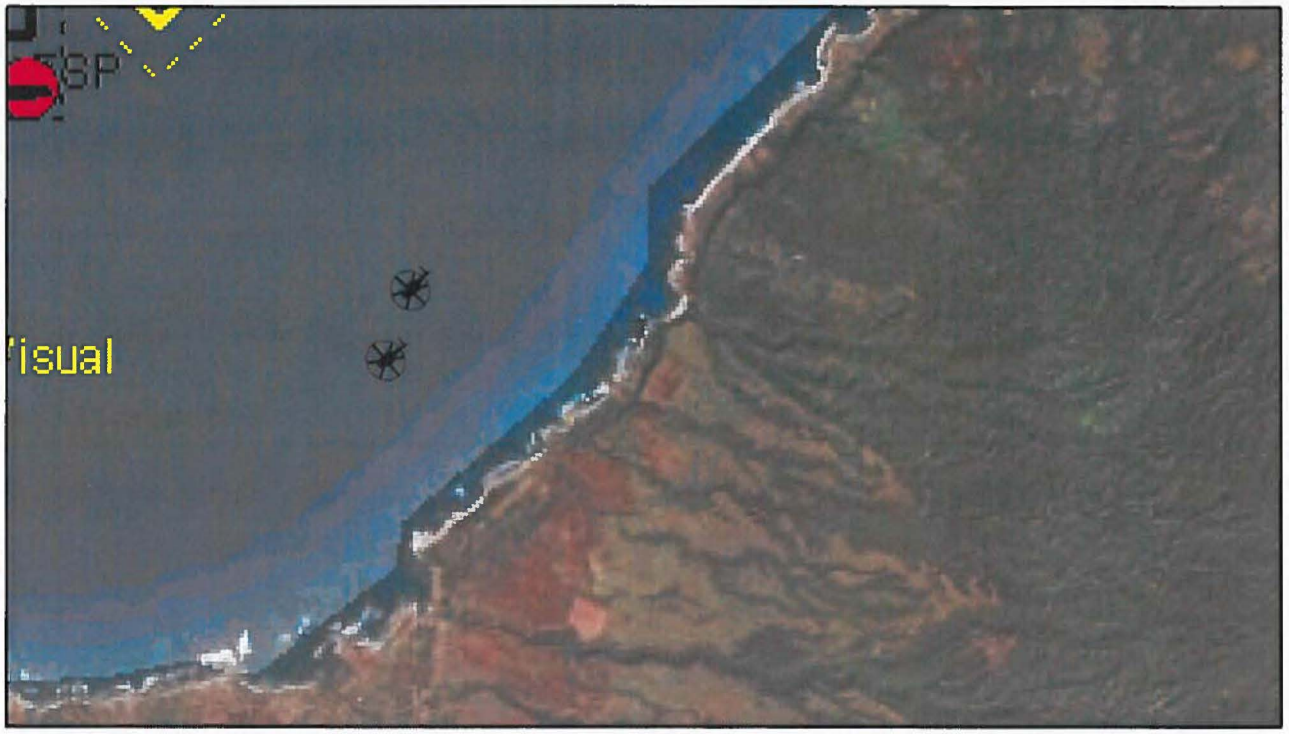

Targets Converge


Hard Left Turn

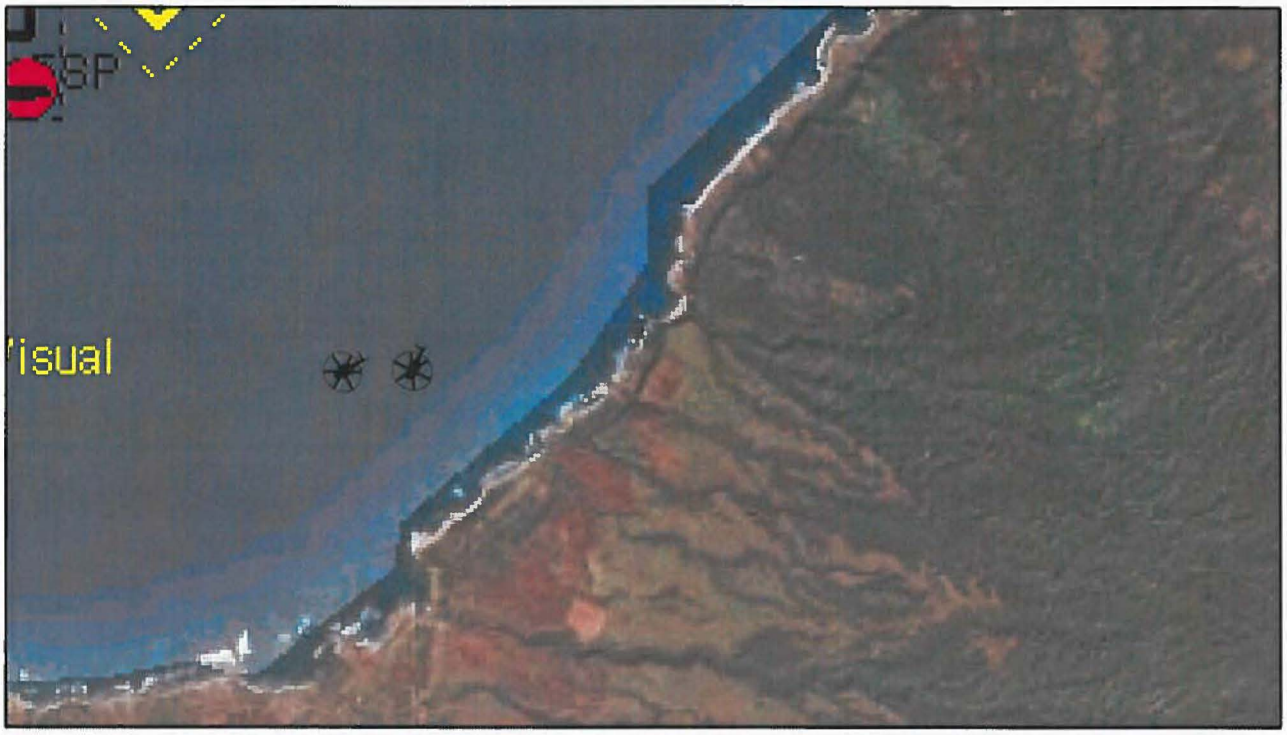



Final Return

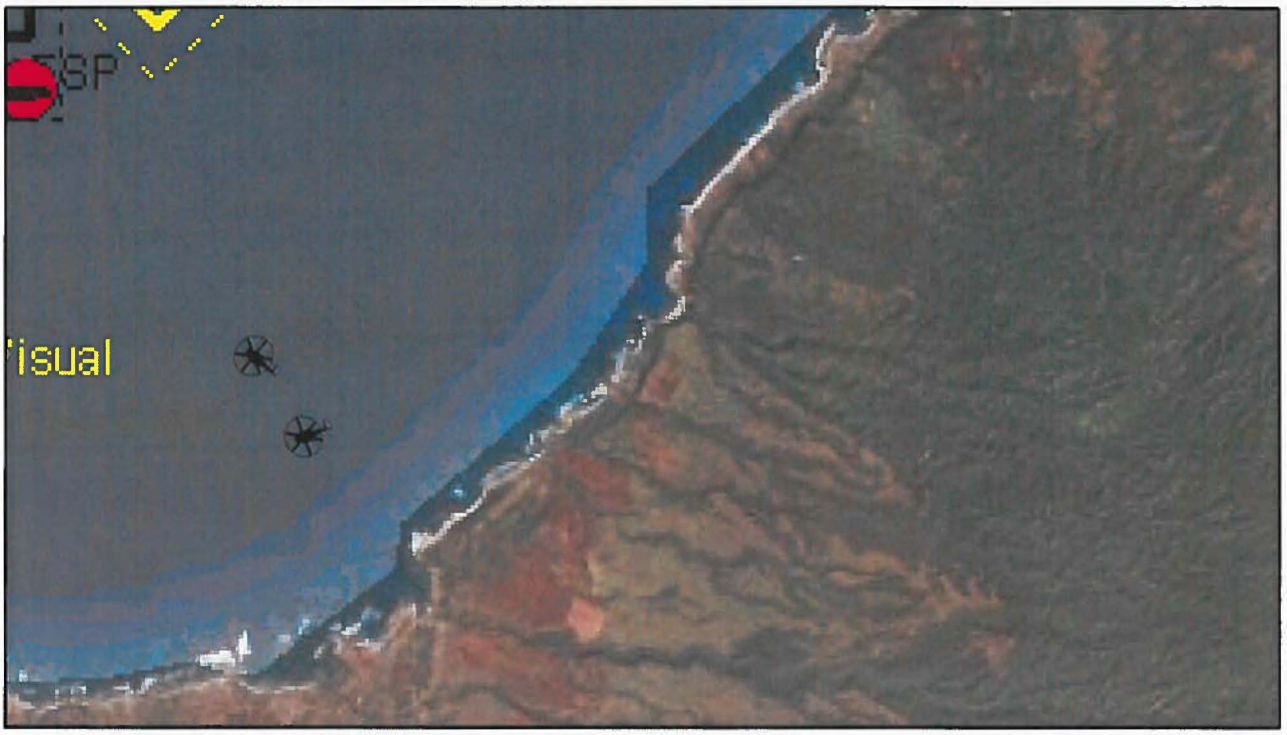



SP
isual

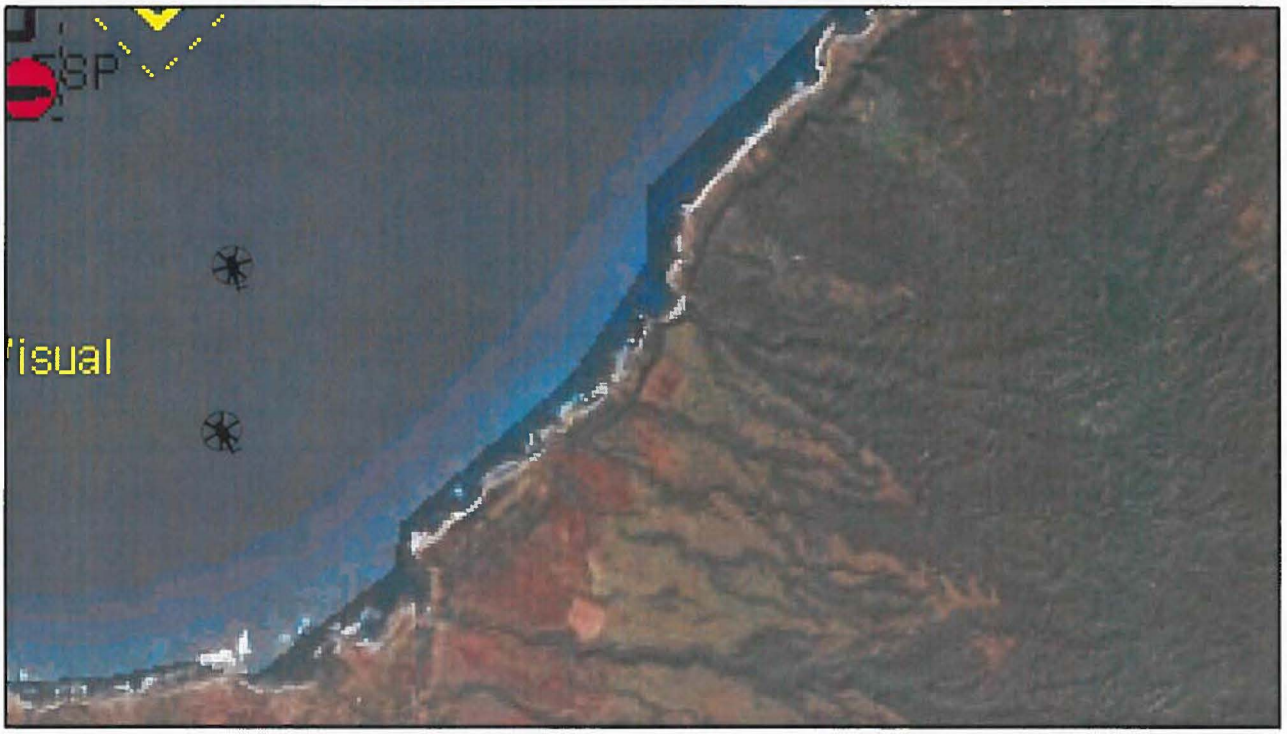

SP
isual


SP
isual


SP
isual


SP
isual


SP
isual


SP
isual

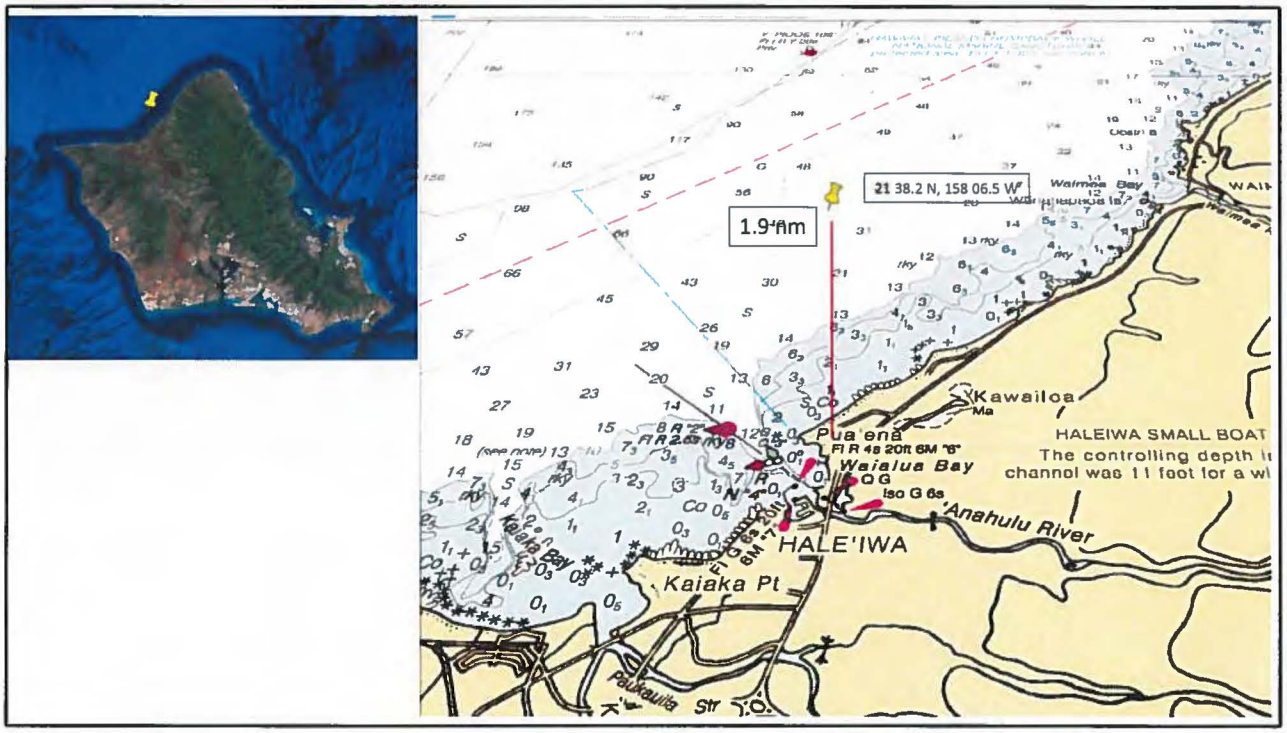

SP
isual


SP
isual


SP
isual


SP
isual


SP
isual


21 38.2 N, 158 06.5 W
1.9 nm
Waimea Bay
Kawailoa
Pua'ena
Fl R 4s 20ft 6M "6"
Waialua Bay
Iso G 6s
HALEIWA SMALL BOAT
The controlling depth i
channel was 11 foot for a wi
'Anahulu River
HALE'IWA
Kaiaka Pt
Kaiaka Bay
Paukauila Str

Deep Drone 8000



Deep Drone 8000 Specifications

- Displacement: 4,100 lb
- Length: 9 ft 3 in
- Width: 4 ft 7 in
- Height: 6 ft 2 in
- Maximum Depth: 8,000 ft
- Speed: 3 knots cruise, 5 knots flank
- Maximum lift: 3,200 lb
- Maximum payload: 300 lb

U.S. Navy Deep Drone ROV The Deep Drone is a submersible remotely operated vehicle designed for mid-water salvage for the United States Navy. One vehicle is based in Largo, Maryland, under the command of The U.S. Navy Supervisor of Salvage and Diving, it is maintained and operated by Phoenix International Inc.. The vehicle is capable of operating at a depth up to 8000 feet as reflected in its full name: "The Deep Drone 8000". The vehicle has a target locating sonar and two tool manipulators capable of working with tools and attaching rigging.

ENCLOSURE (221)

(b) (5)

Pages 892 through 894 redacted for the following reasons:
----------NOT THE FOIA RELEASE AUTHORITY FOR THIS DOCUMENT. TO OBTAIN A COPY OF THIS DOCUMENT, PLEASE VISIT https://www.rmda.army.mil/foia/RMDA-FOIA-Contact.html

DAILY REPORT OF AIR TRAFFIC CONTROL FACILITY

For use of this form, see TC 3-04.81; the proponent agency is TRADOC.

1. DATE	2. LOCATION	3. TYPE OF FACILITY
14-Jan-16	HHI	AIC

4. TIME (UTC)	5. REMARKS
1730	AIC OPN, OPNG BCST CMPLT.USC TWR NOTIFIED. EQUIP CK LIST, RDO, GUARD AND DALR CKS CMPLT, LOUD
	CLEAR.) 10/CIC. CFPL, GRC 171 OTS, STARS LITE OTS.3) 10
0100	SHIFT CHANGE COMPLETE. HT ON AS CIC, ABOVE REVIEWED. DALR AND RADIO CHECKS COMPLETE, LOUD
	AND CLEAR. 3) 10
0500	HT DEPARTS FACILITY, 3) 10 ON AS CIC, ABOVE NOTED. 3) 10
0854	USC/TWR INFORMS AIC THAT HONOLULU, COAST GUARD AND SCHOFIELD PMO RECEIVED REPORTS FROM
	FROM CIVILIAN WITNESSES ABOUT A COLLISION BETWEEN MILITARY HELICOPTERS IN THE NORTHSHORE
	AREA.USC TWR INFORMS THAT NO HHI TENANT AIRCRAFT ARE OPERATING IN LOCAL FLYING AREA. 3) 10/AIC
	INFORMSUSC TWR THAT PEGASUS 31 AND PEGASUS 32, A FLIGHT OF TWO MARINE H-53 SEA STALLION
	HELICOPTERS, WERE BEYOND THEIR REPORTING TIME OF 0844Z AND NEARING THEIR OVERDUE TIME OF
	0859Z. AIC CONTINUED TO MAKE CALLS ON AIC FREQUENCIES IN ATTEMPT TO CONTACT PEGASUS 31 AND
	FLIGHT WITH NO JOY. AIC THEN ATTEMPTED CONTACT ON BOTH GUARD FREQUENCIES WITH NO JOY. AIC
	THEN CONTACTED) 10/KANEOHE TOWER, INFORMED THEM OF SITUATION AND) 10/KANEOHE TOWER
	RESPONDED THAT THEY DID NOT SEE PEGASUS 31 AND FLIGHT ON RADAR NOR HEAR FROM THEM ON
	FREQUENCY AND THAT KANEOHE WAS EXPECTING THEM BACK SOON FOR EXTERNAL OPERATIONS. 3) 10
0900	3) 10/AIC CALLED PU/FEDERAL FIRE INQUIRING AWARENESS OF SITUATION. 3) 10/RESPONDED AFFIRMATIVE
	AND THAT HONOLULU FIRE DEPARTMENT WAS RESPONDING. AIC CONTINUES CONTACT ATTEMPTS. 3) 10
0902	3) 10/AIC CALLED (b)(6) (b) (3) 10 USC § 130b TO INFORM OF SITUATION. HMH 463 ATTEMPT
	CONTACT IN VARIOUS WAYS WITH NO JOY. AIC CONTINUES CONTACT ATTEMPTS. 3) 10
0915	3) 10/AIC PASSED REQUIRED EMERGENCY INFORMATION TO3) 10 TWR AND URGED PCAS ACTIVATION. 3) 10
0918	3) 10/TWR ACTIVATES PCAS. AIC CONTINUES CONTACT ATTEMPTS. 3) 10/FACF AND (b)(6) (b) (3) 10 USC § 130b
	NOTIFIED. 3) 10
0951	AA/TWR NOTIFIES DM/AIC THAT EASYRIDER 41, NAVY H60 SEAHAWK, DISCOVERED DEBRI/LIFEBOAT 3 MILES
	OFFSHORE OF HALEIWA. AIC CONTINUES CONTACT ATTEMPTS. 3) 10
1000	DM/AIC CONTACTS COAST GUARD OFFICER (b)(6) (b) (3) 10 USC § 130b, INFORMS THAT
	C6578, H65, RESPONDING TO SAR SITUATION. DISTRICT 14, UNIFIED COMMAND LEADING SAR EFFORT AT
	(b)(6) (b) (3) 10 USC § 130b
1400	AIC CLOSED, CLOSING BROADCAST COMPLETE. LOG REVIEWED. 3) 10

I CERTIFY that the entries above have been reviewed

NAME *(Last, first, MI)*	RANK
(b)(6) (b) (3) 10 USC § 130b	(b)(6) (b) (3) 10 USC § 130b

DA FORM 3502, OCT 2010 PREVIOUS EDITIONS ARE OBSOLETE APD PE v1.01ES

ENCLOSURE (224)

LIGHTNING AIC - EQUIP CK LIST

EQUIPMENT	AM		PM		DATE 14-Jan-16
	OPR	OTS	OPR	OTS	REMARKS
DALR	x		X		
AAAS	x		x		
6566910	x		X		
TOWER FD	x		X		
TOWER GC	x		X		
TOWER LC	x		X		
TOWER SUPERVISOR	x		X		
RANGE CONTROL	x		X		
BASOPS	x		X		
AN/FSC-127 CONSOLE-FD	x		X		
AN/FSC-127 CONSOLE-FF	x		X		
Facility Clock	x		X		
STARS - Lite AIC		x		X	
WX Display	x		X		
GRC 171		x		X	
BLUE FORCE TRACKER	x		X		
SONY MONITOR	x		X		

LIGHTNING AIC - RADIO CK LIST

RADIO FREQ	OPR	OTS	REMARKS
(b) (2)	x		
	x		
	x		
	x		

Opening CHECKLIST		Closing CHECKLIST	
Print, Review, Initial and Post NOTAMS	x	Close Out DA Forms 3502 and 3503	X
Review and Initial Recent Information File	x	Bundle, Mark and File Flight Progress Strips	X
Initiate DA Forms 3502 and 3503	x	Record Currency	X
Opening Broadcast	x	Record Traffic Count	X
		Trash	X
		Dim Consoles, Turn off Lights and Shutdown CPU	X
		Closing Broadcast	X

RADIO AND GUARD CHECKS ARE NOT INCLUDED IN THE EQUIPMENT CHECKLIST BUT THEIR AUDIO LEVEL STATUS SHALL BE ANNOTATED ON DA FORM 3502R AS THE CHECKS ARE CONDUCTED

DAILY REPORT OF AIR TRAFFIC CONTROL FACILITY

For use of this form, see TC 3-04.81; the proponent agency is TRADOC.

1. DATE	2. LOCATION	3. TYPE OF FACILITY
14-Jan-16	PHHI	VFR TOWER

5. TIME (UTC)	6. REMARKS
0730	TOWER OPEN, OPENING BROADCAST CMPLT. (b) (6) (b)(7)(c) ON AS SL, PREVIOUS LOG REVIEWED. EQUIP CK LIST CMPT, RDO
	GUARD AND DALR CKS CMPLT, LOUD AND CLR. RWY 6 IN USE, FIELD VFR. (b) (6) (b)(7)(c) HNL, (b) (6) (b)(7)(c) WX, AND (b) (6) (b)(7)(c) BASE OPS
	NTFYD. CFPL: GRC 171 AND UHF ATIS 242.4 REMAINS OUT OF SERVICE. (b) (6) (b)(7)(c)
2359	WIND SHIFT RUNWAY 24 IN USE. WIND 280/07, RPW/(b) (6) (b)(7)(c) AND (b) (6) (b)(7)(c) HNL NTFYD. (b) (6) (b)(7)(c)
0100	SHIFT CHANGE COMPLETE, (b) (6) (b)(7)(c) ON AS CIC, ABOVE NOTED. EQUIPMENT CHECK LIST, DALR AND RADIO CHECKS
	COMPLETE, LOUD AND CLEAR. (b) (6) (b)(7)(c)
0500	(b) (6) (b)(7)(c) DEPARTS THE FACILITY. (b) (6) (b)(7)(c) ON AS SHIFT LEADER, ABOVE NOTED. (b) (6) (b)(7)(c)
0600	WIND SHIFT. WIND 070/03. RWY 06 IN USE. (b) (6) (b)(7)(c) HNL AND (b) (6) (b)(7)(c) WX NTFYD. (b) (6) (b)(7)(c)
0900	TOWER CLOSED, CLOSING BROADCAST COMPLETE. CM/HONOLULU, (b) (6) (b)(7)(c) WEATHER AND BR/BASE OPERATIONS
	NOTIFIED. LOG REVIEWED. RECEIVED PHONE CALLS FROM HNL, COAST GUARD AND SCHOFIELD PMO ABOUT
	CIVILIAN REPORTS ABOUT A POSSIBLE MID AIR COLLISION BETWEEN ~~10~~ 2 60 BLACKHAWKS OVER THE WATER OUT AT
	NORTH SHORE. CALLED (b) (6) (b)(7)(c) BAS OPS TO CONFIRM NONE OF OUR AIRCRAFT WERE OUT. HE SAID HE WOULD GET
	SDO TO DO A RAMP CHECK. I THEN CALLED (b) (6) (b)(7)(c) IN AIC TO SEE IF HE HAD ANYONE ON FREQUENCY, HE SAID HE
	HAD A FLIGHT OF 2 H53S ON FREQ. I TOLD HIM TO CONTACT THEM TO COFIRM STATUS. (b) (6) (b)(7)(c)
0915	(b) (6) (b)(7)(c) AIC NTFYS (b) (6) (b)(7)(c) TWR THAT THEY CANT GET A HOLD OF AIRCRAFT. I TELL THEM TO CONTACT THE OPERATIONS
	AND TRY TO REACH THEM ON GUARD. (b) (6) (b)(7)(c)
0918 ~~0937~~	NO JOY WITH AIRCRAFT. I PULL THE CRASH PHONE BECAUSE WE ARE INITIATING OVERDUE PROCEDURES AND
	KANEOHE TOWER CONFIRMS THEY HAVENT BEEN IN CONTACT WITH PG 31 SINCE 0819. I RELAY KNOWN
	INFORMATION BUT MEDEVAC WILL NOT LAUNCH UNLESS THE HAVE A GRID COORDINATE AND IS APPROVED
	BY RANGE CONTROL. PMO NTFYS TWR THAT WE HAVE A WITNESS; (b) (6) (b)(7)(c)
	(b) (6) (b)(7)(c) BR/BAS OPS SUGGESTS USING THE ADDRESS GIVEN ON GOOGLE MAPS TO GET
	A LAT LONG. (3) 10 U
0945	ER 41 H60 CONFIRMS DEBRI AND A LIFE RAFT IN THE WATER BUT NO VISIBLE SURVIVORS. RELAYS LAT LONG.
	(b) (6) (b)(7)(c) FACILITY CHIEF NTFYD. (b) (6) (b)(7)(c)
0956	AIR 1 REPORTS ON STATION. CG 6578 PASSES THRU WHEELER TO ASSIST IN SAR. (b) (6) (b)(7)(c)
1016	PMO CALL ABOUT (b) (6) (b)(7)(c) CRASH RESCUE CONFIRMS POB. (b) (6) (b)(7)(c)

I CERTIFY that the entries above have been reviewed.

NAME (Last, first, MI)	RANK	
(b)(6) (b) (3) 10 USC § 130b		(b)(6) (b) (3) 10 USC § 130b

DA FORM 3502, OCT 2010 PREVIOUS EDITIONS ARE OBSOLETE APD PE v1.01ES

From: system.poc (b)(6) (b) (3) 10 USC § 130b
To: (b)(6) (b) (3) 10 USC § 130b
Subject: F3813PHHI2016014

1,PHHI,2016,1,14,2129N,-1582W,+837,+10,+10,WHEELER AAF
2,PHHI,2016,1,14,1,0,0,24,+26,+14,17,26,0055,,,0,0,0,0,,,,,,,,,,
3,PHHI,2016,1,14,1150,1150,1750,2350,0550,0150,0150,0750,1350,1950,0.00,0.00,0.00,0.00,0.00,0.00,0.0,0.0,0.0,0.0,0.0,0.0,0,0,0,0,0
4,PHHI,2016,1,14,1730,06,,,,,,,,,,
5,PHHI,2016,1,14,TIME CHECK 1600|RSC DRY 1715,,,
6,PHHI,2016,1,14,METAR,1058,340,02,,,9999,10,,,CLR,+17,+15,30.04,,0,, AO2 SLP164 T01710151 $,,

6,PHHI,2016,1,14,METAR,1158,330,02,,,9999,10,,,CLR,+16,+14,30.02,29.130,0,, AO2 SLP159 T01570144 10195 20157 57013 $,,

6,PHHI,2016,1,14,METAR,1258,350,02,,,9999,10,,,CLR,+16,+15,30.00,,0,, AO2 SLP151 T01600152 $,,

6,PHHI,2016,1,14,METAR,1358,000,00,,,9999,10,,,CLR,+15,+14,29.99,,0,, AO2 SLPNO T01520144 $,,

6,PHHI,2016,1,14,METAR,1458,040,01,,,9999,10,,,CLR,+16,+15,29.98,29.090,0,, AO2 SLP146 T01560150 57012 $,,

6,PHHI,2016,1,14,METAR,1558,340,01,,,9999,9,,,CLR,+14,+13,30.01,,0,, AO2 SLP158 T01400132 $,,

6,PHHI,2016,1,14,METAR,1658,340,03,,,9999,10,,,CLR,+14,+14,30.02,,0,, AO2 SLP162 T01430136 $,,

6,PHHI,2016,1,14,METAR,1758,320,02,,,9999,9,,,CLR,+15,+15,30.03,29.140,0,, AO2 SLP166 T01530146 10162 20138 52017 $,,

6,PHHI,2016,1,14,METAR,1858,000,00,,,9999,10,,,CLR,+19,+18,30.05,,0,, AO2 SLP170 T01940176 $,,

6,PHHI,2016,1,14,METAR,1958,160,04,,,9999,10,,,FEW019,+23,+19,30.06,,2,, AO2 SLP172 T02280187 $,,

6,PHHI,2016,1,14,METAR,2058,330,07,,,9999,10,,,SCT029,+24,+18,30.04,29.150,4,, AO2 SLP165 T02380184 50002 $,,

6,PHHI,2016,1,14,METAR,2158,260,07,,,9999,10,,,CLR,+24,+17,30.00,,0,, AO2 SLP151 T02440169 $,,

6,PHHI,2016,1,14,METAR,2258,290,06,,,9999,10,,,CLR,+25,+17,29.96,,0,, AO2 SLP137 T02540165 $,,

6,PHHI,2016,1,14,METAR,2358,280,09,,,9999,10,,,CLR,+26,+17,29.94,29.050,0,, AO2 SLP131 T02560170 10258 20153 57033 $,,

6,PHHI,2016,1,15,METAR,0058,260,11,17,,9999,10,,,CLR,+26,+17,29.94,,0,, AO2 SLP131 T02550174 $,,

6,PHHI,2016,1,15,METAR,0158,260,10,,,9999,10,,,CLR,+25,+18,29.95,,0,, AO2 SLP136 T02470175 $,,

6,PHHI,2016,1,15,METAR,0258,270,07,,,9999,9,,,CLR,+24,+18,29.95,29.060,0,, AO2 SLP136 T02380177 50003 $,,

6,PHHI,2016,1,15,METAR,0358,220,02,,,9999,10,,,CLR,+23,+17,29.93,,0,, AO2 SLP131

ENCLOSURE (225)

T02260173 $,,

6,PHHI,2016,1,15,METAR,0458,290,05,,,9999,10,,,CLR,+21,+17,29.98,,0,, AO2 SLP148 T02070174 $,,

6,PHHI,2016,1,15,METAR,0558,080,02,,,9999,10,,,CLR,+22,+18,29.99,29.100,0,, AO2 SLP150 T02160176 10257 20205 53016 $,,

6,PHHI,2016,1,15,METAR,0658,060,02,,,9999,10,,,CLR,+21,+18,29.99,,0,, AO2 SLP149 T02050176 $,,

6,PHHI,2016,1,15,METAR,0758,VRB,01,,,9999,10,,,CLR,+19,+17,29.98,,0,, AO2 SLP144 T01940174 $,,

6,PHHI,2016,1,15,METAR,0858,320,02,,,9999,10,,,CLR,+18,+16,29.98,29.090,0,, AO2 SLP145 T01750162 58006 $,,

6,PHHI,2016,1,15,METAR,0958,270,03,,,9999,10,,,CLR,+18,+17,29.96,,0,, AO2 SLP137 T01810168 402580138 $,,

0900 RECEIVED PHONE CALLS FROM HNL, COAST GUARD, AND SCHOFIELD PMO. ABOUT civilian reports of a possible collission BETWEEN 2 BLACKHAWKS. I INFORMED (b)(6), (b)(3) BASOPS OF THE INFO AND CONFIRMED NO ARMY ACFT WERE OUT. HE SUGGESTED A RAMP Sweep By SDO. I agreed. MEAN WHILE I RETURN CALLS AND CONFIRM WE HAVE NO ACTIVE FLIGHT PLANS. BUT WERE IN THE PROCESS of CONDUCTING A RAMP SWEEP. I THEN CONTACT AIC, 10 USC 130 ABOUT THE SITUATION. THEY INFORMED ME THEY HAD ACFT OUT (MARINE) AND THEY WERE TRYING TO ESTABLISH Communication.

0957 0918 - AIC NTFYD ME THAT KANEOHE TOWER LAST SPOKE TO PG AT 0819 AND THEIR OPS HADN'T HEARD FROM THEM. THIS ALONG WITH THE CIVILIAN witnesses. We DECIDED TO pull THE CRASH PHONE. I RELAYED THE INFO AVAILABLE INTENDING FOR MEDEVAC TO LAUNCH. THEY SAID THEY COULDN't Launch w/out a grid. coordinate and APPROVAL FROM Range Control.

0945 ER 41 REPORTS DEBRIS AND A LIFEBOAT IN THE WATER 3 miles offshore OF HALEIWA. I RELAY THIS INFO TO ALL APPLICABLE AGENCIES. THEY PROVIDE LAT/LONG. EQ NTFYD

0956 · AIR 1 REPORTS ON STATION. CG RESCUE TRANSITIONS HHI TO ASSIST IN SAR.

1016 : PMO CALLS ABOUT (b) (6) (b)(7)(c), WHO WAS THE MAIN WITNESS. ALSO THE ONE I CALLED TO SEE WHAT HE HAD TO SAY. THIS WAS PRIOR TO pulling CRASH PHONE. CRASH RESCUE NTFYS ME NO SURVIVORS HAS ~~RESPOND~~ BEEN FOUND AS OF YET.

(b)(6) (b) (3) 10 USC § 130b

226

ENCLOSURE ( )

PEGASUS 31 IN-FLIGHT INITIAL CALL CAME IN AT 0829Z WHERE HE REPORTED TURTLE BAY. THE LEAD AIRCRAFT SAID THAT HE WAS A FLIGHT OF 2 H-53 WITH 6 SOULS ON EACH AIRCRAFT. PEGASUS 31 WAS REQUESTING BLACK SECTOR. I ISSUED PEGASUS 31 A REPORT TIME OF 15 OR ARRIVAL BLACK. PEGASUS 31 IN-FLIGHT DID NOT REPORT AT ETA OR ARRIVAL. AT THIS TIME I ATTEMPTED TO ESTABLISH CONTACT ~~WITH~~ WITH (b)(3) 10 PEGASUS 31 BUT NO RESPONSE WAS RECEIVED. SHORTLY AFTER THE FIRST ATTEMPT TO ESTABLISH CONTACT WITH PEGASUS 31, I TRIED AGAIN; NO RESPONSE. AFTER TRYING TO MAKE CONTACT TWICE I RECEIVED A CALL FROM TOWER MENTIONING THAT ~~HNL~~ A CALL FROM HNL ABOUT A COLLISION NEAR THE NORTH SHORE AREA. I RELAYED THE INFO TO THE SHIFT LEADER IN WITCH HE BEGAN TO CALL AROUND. IT WAS AT THIS TIME THAT I ASSISTED THE SHIFT LEADER WHEN POSSIBLE AND CONTINUED TO REACH OUT TO PEGASUS 31.

(b)(6) (b) (3) 10 USC § 130b

15 JAN 2016

Statement Continuation 1/15/16

This statement is in continuation of the first statement I wrote.

The following information reflects what has been documented on the Daily Report of Air Traffic Control Facility of the events in its entirety.

0854Z: 10 USC 13/TWR informs AIC that Honolulu, Coast Guard and Schofield PM received reports from civilian witnesses about a collision between military helicopters in the northshore area. (6), (b)/TWR informs that no HHI tenant aircraft are operating in local flying area. 10 USC 13/AIC informs 10 USC 13/TWR that Pegasus 31 and Pegasus 32, a flight of two Marine, H-53, Sea Stallion helicopters, were beyond their reporting time of 0844Z and nearing their overdue time of 0859Z. AIC continues to make calls on AIC frequencies in attempt to contact Pegasus 31 and flight with no joy. AIC then attempted contact on both guard frequencies with no joy. AIC then contacted Kaneohe Tower 10 USC 130b inform them of situation and 10 USC 13/Kaneohe Tower responded that they did not see Pegasus 31 and flight on radar nor hear from them on frequency and that Kaneohe Tower was expecting them back soon for external operations. (b) (3) 10 USC

0900Z: 10 USC 13/AIC called 10 USC 13/Federal Fire inquiring awareness of situation. (6), (b)/responded affirmative and that Honolulu Fire Department was responding. AIC continues contact attempts. (b) (3) 10 USC

0902Z: 10 USC 13/AIC called (b)(6) (b) (3) 10 USC § 130b to inform of situation. HMH463 attempt contact in various ways with no joy. AIC continues contact attempts. 10 USC 13

0915Z: 10 USC 13/AIC passed required emergency information to AA/TWR and urged activation. USC

0918Z: 10 USC 13/TWR activates PCAS. AIC continues contact attempts. 10 USC 13/FACF and

(b)(6) (b) (3) 10 USC § 130b

(continued from other side)

0912Z: (b) (3) 10 USC/TWR notifies (b) (3) 10 USC/AIC that Easyrider 41, Navy, H-60, Seahawk discovered debri/lifeboat 3 miles off-shore of Haleiwa. AIC continues contact attempts. (b) (3) 10 USC

1000Z: (b) (3) 10 USC/AIC contacts Coast Guard Officer (b)(6) (b) (3) 10 USC § 130b at Barbers Point (b)(6) (b) (3) 10 USC § 130b informs that C6578, H-65, responding to SAR situation. District 14, Unified Command leading SAR effort at (808)535-3333. (b) (3) 10 USC

1400Z: AIC closed, closing broadcast (3) 10 USC complete. Log reviewed. (b) (3) 10 USC

Sincerely,

(b)(6) (b) (3) 10 USC § 130b

Parents of missing sergeant blame Marines for accident (Honolulu Star-Advertiser)

The parents of a Hawaii Marine killed in the Jan. 14 crash of two helicopters off Oahu's North Shore say the CH-53E Super Stallions shouldn't have been flying because of safety concerns over worn-out Marine Corps choppers.

But beyond that, Mike and Lisa De La Cruz say they are angry and maintain that the Marine Corps wasted lots of time in trying to make a recovery at sea that has yielded remains identifications for nine of 12 aboard — but not their son.

Multiple weeks were lost training divers for dives that never occurred and in replacing a faulty generator on the search ship, said the De La Cruzes, the parents of 24-year-old crew chief Sgt. Dillon Semolina.

The Marine Corps frequently pointed to "unfavorable weather and sea conditions" as also preventing it from searching for the lost air crews and choppers, but the parents said the fact that actual searches occurred over just 17 days out of 84 "is absolutely ridiculous. This should be an embarrassment for the Corps."

During that time, ocean action was dispersing the wreckage in waters 300 to 340 feet deep and making it harder to retrieve all the Marines, they maintain.

The III Marine Expeditionary Force, the unit's higher command in Okinawa, Japan, disagreed with the De La Cruzes' assessment.

"No time was wasted," said Capt. Cassandra Gesecki, a spokeswoman for the command. "U.S. Navy dive teams immediately supported the initial search and rescue effort and began the underwater search phase, ultimately locating the mishap site."

Mapping of the debris field continued while "mixed-gas diving preparation" began, Gesecki said in an email statement.

"As more advanced search equipment arrived on island, it was determined that the depth of the mishap wreckage exceeded safe manned diving limits," she said. "At that point a salvage and recovery capable Remotely Operated Vehicle team was rapidly deployed to support the salvage and recovery effort."

While one of search ship USNS Salvor's generators did require repairs, "the largest cause for delay to the effort was the rough winter surf conditions of the North Shore," she said.

Twelve Marines with Marine Heavy Helicopter Squadron 463 and Marine Aircraft Group 24 at Kaneohe Bay went down in the two choppers. Witnesses reported seeing a fireball at sea. No mayday call for help was made. The size of the debris field was later described as being several square miles.

ENCLOSURE (227)

Three days before the crash, Lt. Col. Edward Pavelka, commander of HMH-463, was relieved of command.

Higher command had "lost confidence in his (Pavelka's) ability to continue to lead the squadron," the Corps said previously. "The Marine Corps holds all Marines, especially commanders, responsible for maintaining complete accountability and responsibility in upholding the highest standards for combat readiness."

Although the Marine Corps didn't reveal the reason for the dismissal, Mike De La Cruz, a former Marine Corps crew chief himself, said he found out that HMH-463 had the lowest flight hours of any helicopter squadron across the Corps, meaning the squadron wasn't combat-ready, and Pavelka was subsequently removed.

But De La Cruz said he also learned Pavelka "refused to fly those helicopters due to safety concerns."

The Minnesota man provided pictures from a similar two-helicopter CH-53 flight in Hawaii that he said had to make an emergency landing March 5 when a several-foot flap ripped open on the fuselage of one. On another occasion a helicopter's nose wheel would not retract, he said.

With ongoing maintenance issues, at least one Marine with the squadron surrendered his wings because "he's too scared to fly," De La Cruz said. The couple said they are outraged and frustrated.

De La Cruz said it's "unfathomable" that the Marine Corps would allow the two choppers to fly the night his son was killed. "And on top of that, they are not listening to what we're trying to bring to the surface."

"We want to save other Marines' lives," he said. "Since this accident there have been other emergency landings in Hawaii, and they will not own up to it or stop this crap from going on."

De La Cruz said he's raised the concerns with Minnesota Sens. Al Franken and Amy Klobuchar and Gov. Mark Dayton.

All of HMH-463's Super Stallions should be grounded for a thorough safety review, followed by a unit-by-unit look at the same helicopters in other units, he said. De La Cruz said the maintenance problems are due to funding shortfalls.

"They don't have any parts to replace anything, to repair anything of any sort," he said. "So what they were doing was robbing Peter to pay Paul."

Marine Corps spokesman 1st Lt. Joseph Butterfield said the investigation into Pavelka's removal "will be comprehensive, but it would be inappropriate to speculate on issues covered by the scope of the investigation or the CH-53 aviation mishap board."

The Marine Corps in recent years had 12 CH-53Es at Kaneohe Bay. A 2016-2026 Corps-wide aviation plan reported a decrease in flight hours and an "uptick" in mishap rates.

Marine Corps Commandant Gen. Robert Neller was asked at a Senate subcommittee hearing last month whether budget cuts led to fatal helicopter crashes and put other Marines at risk, Marine Corps Times reported.

Neller said the CH-53 community was probably the "most challenged" in part because of a shortage of aircraft, but said the Corps planned to put more of the choppers through maintenance and make spare parts more available.

The Virginian-Pilot newspaper obtained an internal Marine Corps report, meanwhile, that said commanders were hamstrung by "unacceptably poor readiness" due to parts shortages, maintenance backlogs and years of wear and tear.

By Jan. 17, three days after the unexplained crash of the two CH-53Es 2 miles off Waimea Bay, "minimal" human remains had been recovered. Lisa De La Cruz said with one exception, bone fragments and small tissue samples were most of what was subsequently located.

As of March 2, nine Marines had been identified through DNA and other means, but she said no trace of her son and two others in his helicopter was found.

A Marine Corps message to the family said that as of March 27 the Salvor was "now complete with salvage and recovery operations." Neller, the commandant, subsequently ordered one more sweep, which ended April 4, the Marine Corps said.

Lisa De La Cruz would like the Marines to find her son and the two others, but it seems unlikely. Now she has memories of her 6-foot-4, 220-pound son who was a workout "beast" but had a tender heart inside.

"Dillon was our family hero and is missed so dearly," she said in an email. The family started the Sgt. Dillon Semolina Memorial Scholarship Fund at youcaring.com.

"To continue in walking in Dillon's footsteps, as he would want us to do, we are working as a family to have scholarships available to students of Delano High School (in Minnesota)," the Web page states.

The Marine always dreamed of becoming a veterinarian or doctor and planned to get out of the Corps and go to school in Salt Lake City in the fall.

"Unfortunately, those plans have come to an abrupt end, but we are going to keep his name going," the family says on the scholarship site.

http://www.staradvertiser.com/hawaii-news/parents-of-missing-sergeant-blame-marines-for-accident/

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)



(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

Page 919 redacted for the following reason:
- -





(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F)

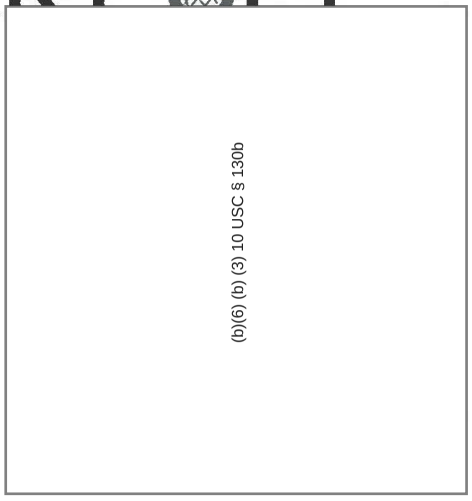
(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)



(b)(6) (b) (3) 10 USC § 130b, (b) (7)(F), (b) (2)

SALVAGE AND RECOVERY OPT



559

26 Jan 2016

ENCLOSURE (29)

OPT Agenda

- Develop COA for transfer of debris USNS Salvor to MCBH H101
  - Priority 1 – Transfer of debris is conducted safely and the debris is preserved for analysis
  - Priority 2 – Transfer is done by the most efficient means possible in order to minimize transfer/transient times.

(b)(6), (b)(3)

Current Timeline

- USNS Salvor departs for salvage location on Saturday 30 January 2016
- Dive operations are estimated to take 21 days

30 JAN → 21 FEB

Overall Tasks for MAG 24

- AMB
  - Supervise the salvage and recovery of debris
  - Provide coordination between AMB Flight Surgeon and PACFLT Mortuary Affairs Officer for transfer of HR
  - Coordinate with MDSU-1 and HMH 463 for walk through of CH-53
  - Provide prioritization of parts/equipment for recovery to MDSU-1
  - Provide two members for embarkation aboard USNS Salvor
  - Coordinate with COMCAM for high resolution photography
  - Coordinate for the temporary embarkation of NSC rep aboard USNS Salvor

Overall Tasks for MAG 24

- MAG S-4:
  - Serve as overall lead for planning/coordination of the Salvage and Recovery operation
  - Develop suitable COAs for the transfer of debris – all COAs must be supportable by USNS Salvor and MDSU-1.
- MAG S-3:
  - Support MAG S-4 in planning and coordination

Overall Tasks for MWSD

- MWSD:
  - Coordinate directly with MDSU-1
  - Provide two SMEs aboard USNS Salvor
    - One SNCO to act as LNO from Salvor MAG HQ
  - Provide lists of specialized equipment as per sepcor
  - Provide list of all HAZMAT, pressurized gear, explosive material aboard a CH-53 to MDSU-1 and USNS Salvor
  - Overall responsible for the transport and preservation of recovered debris and HR.

Requested Support from USNS Salvor

- Provide billeting space for embarked MAG 24 personnel. (5)
- Provide guidance on possible transfer locations and methods
- Provide input on capacity of USNS Salvor and frequency of download of debris
- Provide times/location of download of debris to MAG 24 lead

Requested Support from MDSU-1

- Advise ship board LNO on best lifting procedures for all debris recovered
- Provide feedback to AMB regarding the prioritization of debris to recovery

Possible Support from CLB-3

- CLB-3:
  - BPT augment MWSD-24 with transportation and MHE.

Requested Support from MCBH

- Coordination for usage of either Waterfront OPs pier or MCCS pier (or beach adjacent)
- Coordination of MP support to open 1st Street IVO H101 and possibly escort debris movements
- Coordination with HPD for possible escort of debris via tractor trailer from non-MCBH locations.

Possible Support from 8th TSC

- Provide input on availability of LSV during months of February/March 2016.
- LSV support IVO Kbay to download debris onto pre-staged trucks which are deck loaded on the LSV

Possible Support from 13th MEU ARG

- LCU support IVO KBay to download debris onto pre-staged trucks which are deck loaded on the LCU

Initial COAs

(b)(6), (b)(3)

- COA 1:
  - ➢USNS Salvor downloads debris IVO Haleiwa to awaiting LSV/LCU.
- COA 2:
  - ➢USNS Salvor downloads debris at Pearl Harbor to awaiting Tractor Trailers.
- COA 3:
  - ➢USNS Salvor downloads debris IVO KBay directly pierside or to awaiting LSV/LCU.

Requests for Information (RFIs)

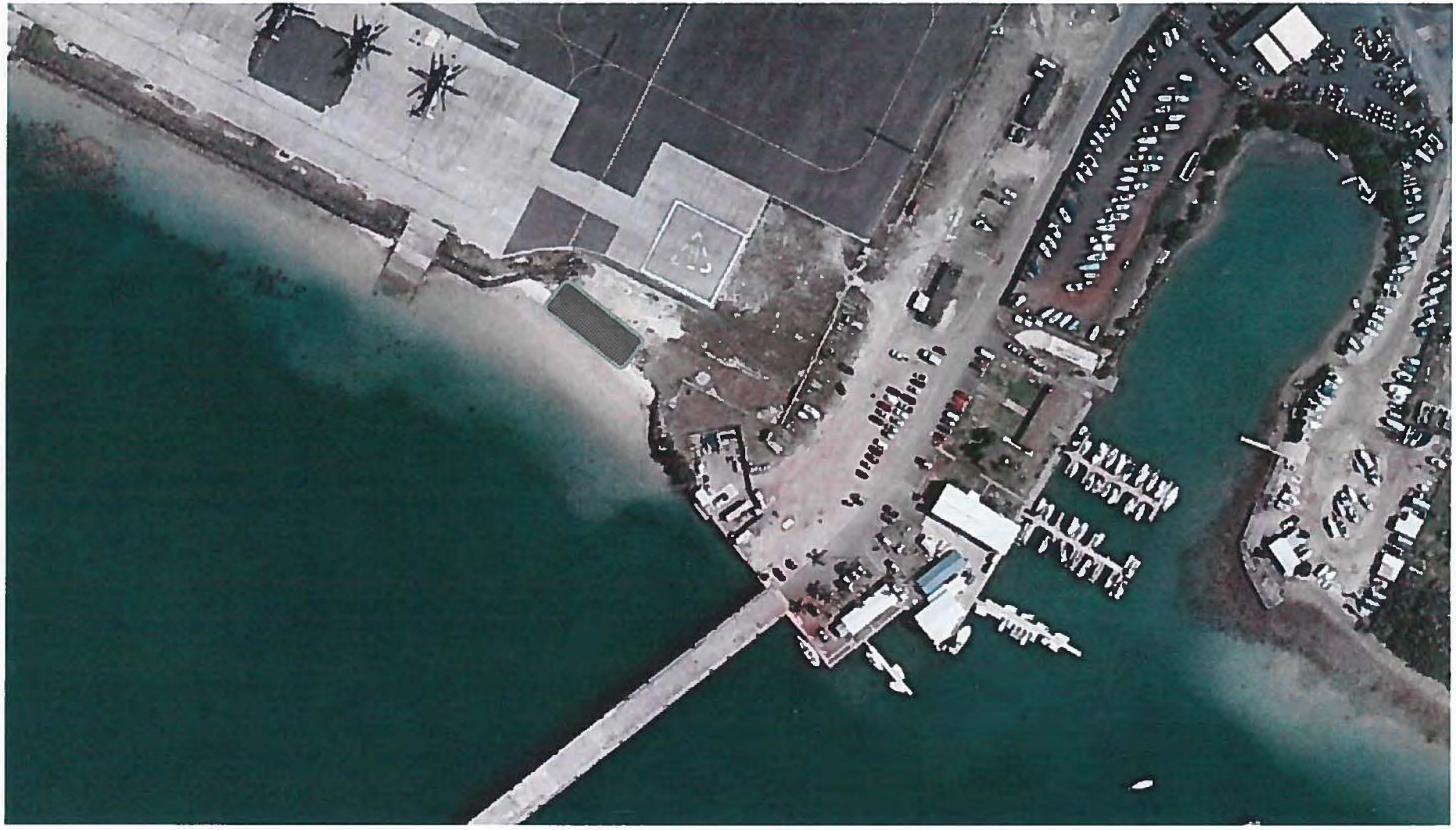
- Can USNS Salvor moor pierside at Kbay?
- Can USNS Salvor anchor in KBay and transfer debris to an awaiting LSV/LCU with pre-staged trucks?
- Transit time between North Shore and Kbay?
  - All Crafts

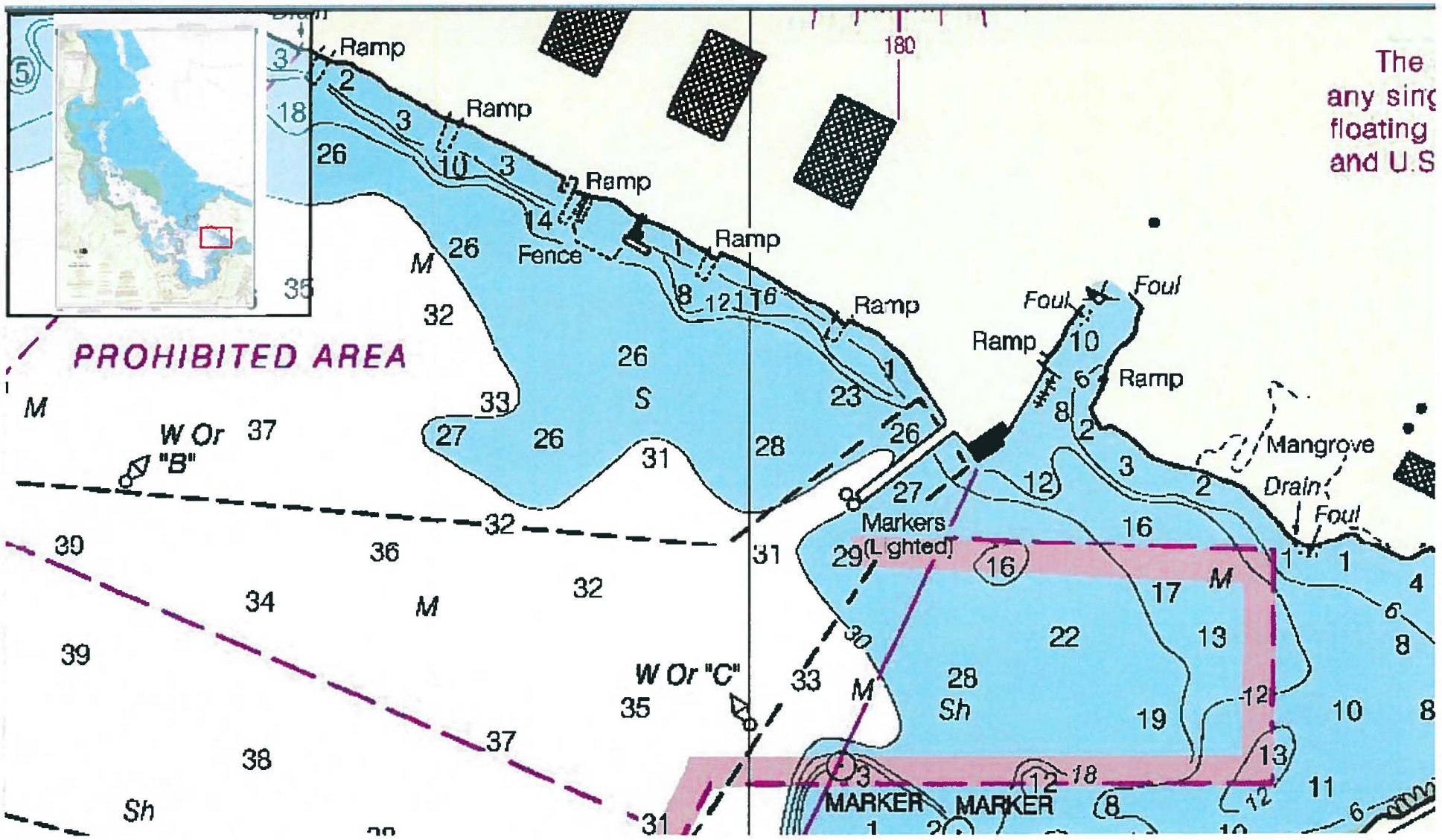
RFIs cont.

- Which pier (Waterfront Ops or MCCS) supports the download of the USNS Salvor?
- Can 13th MEU ARG shipping support with LCUs? Availability dates 19-24 Feb?
- MWSD limitations due to competing requirements (i.e. Island Warrior)

Discussion/Concerns/Way Ahead

BACKUP SLIDES OF "Canoe Beach"





The
any sing
floating
and U.S
PROHIBITED AREA
Ramp
Ramp
Ramp
Ramp
Ramp
Ramp
Ramp
Fence
Foul
Foul
Foul
Mangrove
Drain
Markers
(Lighted)
W Or
"B"
W Or "C"
MARKER
MARKER
180

CORPS
Marine Times
05.02.16 - 05.09.16



NCO PROMOTION PANELS
Get ready now — or risk a Page 11

TOP GUNNER & GRUNT CAPTAIN
Meet this year's Hulbert and Leftwich Trophy winners

2017 PAY RAISE
Congress pencils in enough for one more 12-pack a month



FLEET IN PERI

Missions & Marines are at risk.

It's worse than you thought and the Corps can't fi

@MarineTimes facebook.com/MarineCorpsTimes Download our app

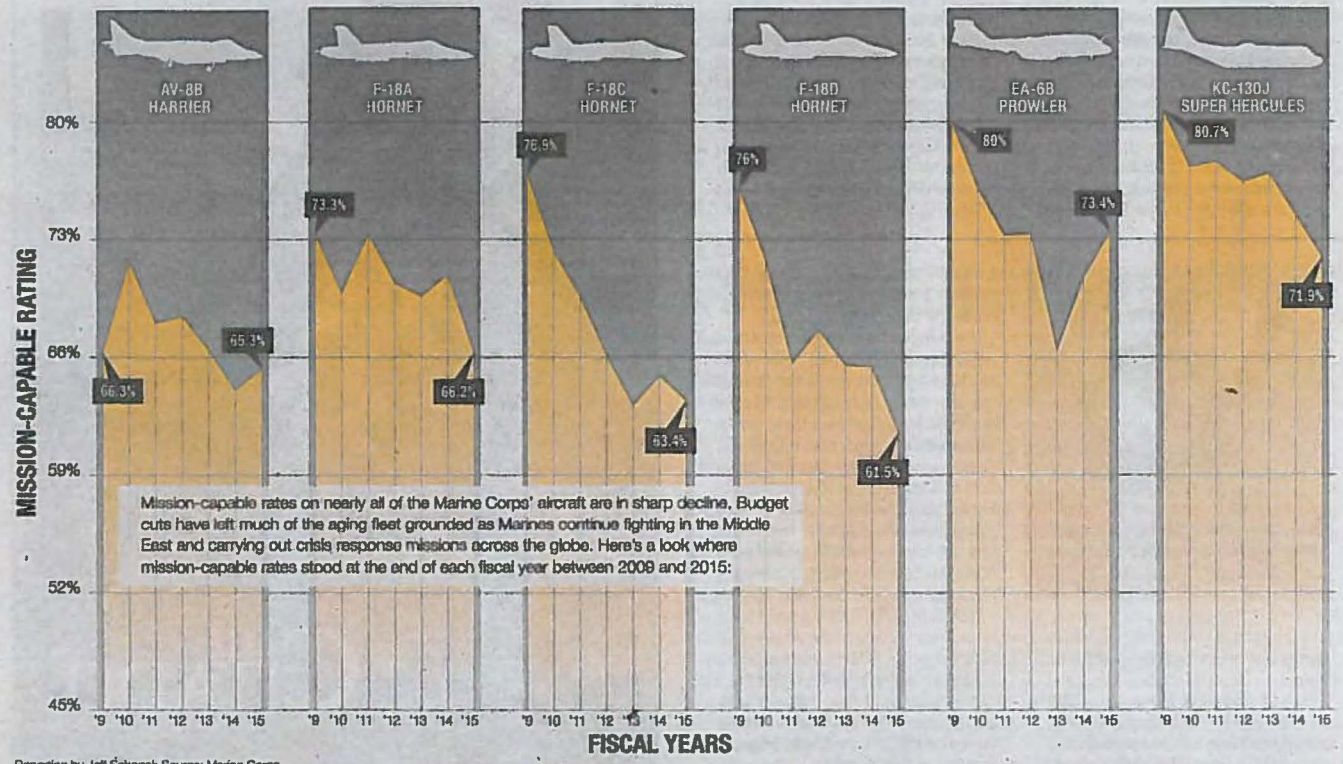
$3.75

Never stop being their protector.
Start a life insurance quote today usaa.com/life | 800-531-LIFE
Life insurance provided by USAA Life Insurance Company, San Antonio, TX, and in New York by USAA Life Insurance Company of New York, Hazeland Falls, NY. All insurance prod... to state availability, issue limitations, and contractual terms and conditions. Each company has sole financial responsibility for its own products. © 2016 USAA 228731-0316

ENCLOSURE (230)

STRAINED WARBIRDS

Budget cuts are crippling the Marine Corps' air power



Mission-capable rates on nearly all of the Marine Corps' aircraft are in sharp decline. Budget cuts have left much of the aging fleet grounded as Marines continue fighting in the Middle East and carrying out crisis response missions across the globe. Here's a look where mission-capable rates stood at the end of each fiscal year between 2009 and 2015:

Reporting by Jeff Schogol; Source: Marine Corps

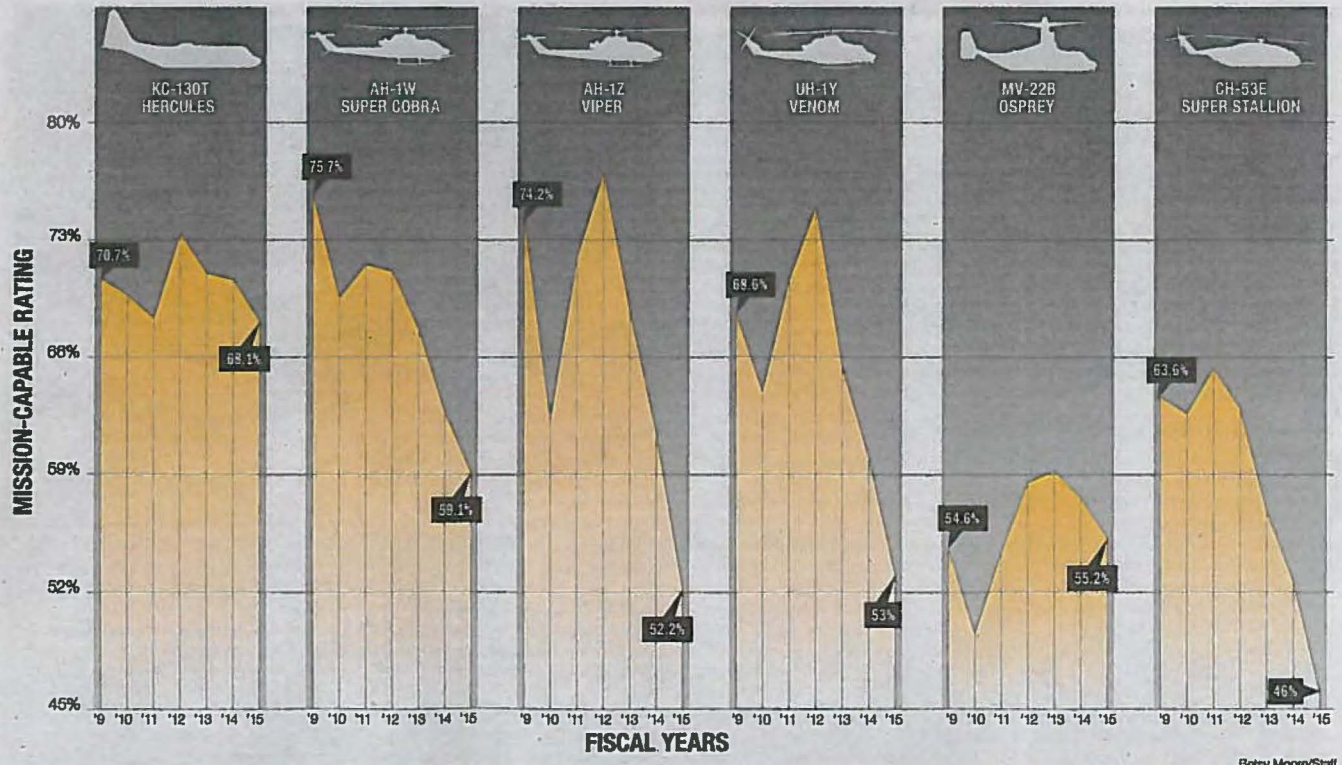
By Jeff Schogol
jschogol@militarytimes.com

The number of Marine Corps aircraft ready to fly on any given day has plummeted in the last seven years, leading to serious questions about the safety of the service's aircraft as leathernecks continue to wage war on terrorists and respond to crises around the world.

Mission-capable rates for all but one of the Marine Corps' 12 fixed-wing, rotary and tiltrotor airframes have fallen since the end of fiscal 2009, according to data obtained by Marine Corps Times via Freedom of Information Act request. While officials stress that the number of flyable aircraft fluctuates daily, the downward trends have alarmed Marine leaders and members of Congress.

Sen. John McCain, R-Ariz., went as far as describing the Marine Corps' aviation problems as a "crisis."

See **MISSION CAPABLE** next page



Betsy Moore/Staff



Sgt. Joshua Thomas and Cpls. Forest M. Owen and Andrew Enriquez, from left to right, detach a rotor blade from a CH-53E Super Stallion while aboard an amphibious assault ship.

LANCE CPL. CLAUDIA M. PALACIOS/MARINE CORPS



Marines fix two CH-53E Sea Stallion helicopters. Mission-capable rates on the heavy-lift helos are on the decline.

MC3 TRAVIS J. KUYKENDALL/NAVY

MISSION CAPABLE From previous page

Of the Marine Corps' 276 F/A-18 Hornets, only 87 are currently flyable, Marine Corps officials said on April 20. That is less than one-third of all the service's F/A-18A-D variants that can be used to strike the Islamic State group, provide close-air support or fly reconnaissance missions.

By comparison, 73 percent of F/A-18As were mission capable in fiscal 2009 along with 77 percent of the C-variant and 76 percent of F/A-18Ds.

Marine helicopters have seen the biggest drop in readiness. Currently, only 42 of the Marine Corps' 147 CH-53E Super Stallions are flyable, or about 28.5 percent of the CH-53E fleet, according to Marine aviation officials. At the end of 2009, the CH-53E's mission-capable rate more than doubled that at 63 percent, with 39 percent of the helos fully mission capable.

On average, CH-53E squadrons that are not deployed or getting ready to deploy only have three of their nine helicopters ready to "fight tonight," said Col. Sean Salene, commander of Marine Aircraft Group 29 at Marine Corps Air Station New River, North Carolina.

"In the typical squadron ... the remaining six are not able to fly tonight due to a shortage in parts, long-term fixes or need some kind of attention that the squadron doesn't have the ability to provide," Salene told Marine Corps Times. "What that means is we can meet today's mission, but we haven't the depth to meet tomorrow's."

FEWER FLIGHT HOURS, MORE MISHAPS

As the Marine Corps figures out how best to meet its missions overseas, those left in the rear are flying less — and that has leaders, pilots and members of Congress concerned.

Marine aviation-related deaths hit a five-year high in September when fatalities reached 18 during the first nine months of 2015. About four months later, a dozen more Marines were killed when two CH-53E Super Stallions crashed off the coast of Hawaii.

They were assigned to Marine Heavy Helicopter Squadron 463, and their commanding officer had been relieved of command three days prior. A Marine familiar with the situation there told Marine Corps Times following the crash that the squadron as a whole was "way, way low" on flight time, adding "they were not flying enough."

Retired Navy Cmdr. Chris Harmer, a former HH-60H Seawhawk instructor pilot, says steep federal budget cuts are to blame. There's a direct line between flight hours and mishaps, he said.

"For a given population of pilots — aviators," he said, "the less they fly, the less training missions they get, the less training the aviation maintenance personnel get, the less money we have for spare parts, the less money we have for training exercises, the higher the mishap rate will be if everything else is held constant."

Marine CH-53E pilots averaged about 10.7 flight hours over the last 30-day reporting period, said Capt. Sara Burns, a Marine Aviation spokeswoman. Between Feb. 18 and March 18, Hornet pilots were averaging about 8.8 flight hours, she said. That was a little more than half the 15.7 flight hours the Marine Corps wanted to give F/A-18 pilots during that time period.

Harmer said ideally, the pilots should fly between 25 and 30 hours per month. Averaging eight or nine hours a month could lead to fatal mistakes, he warned.

"Fifteen hours a month for a Hornet, to me that's the absolute hard deck," he said. "You're increasing risk with every hour beneath that. Eight hours a month, that's completely irresponsible, completely unsustainable. You're going to kill a lot of people if that's the new norm."

Burns said Marine aviators' flight hours vary. Those gearing up to deploy are likely to have all or most of their aircraft in working order and tend to fly more.

Marine All-Weather Fighter Attack Squadron 533, for example, is set to deploy. All 12 of that squadron's aircraft are flyable and pilots averaged 10.8 flight hours in the last 30-day reporting period. Meanwhile Marine Fighter Attack Squadron 312, a South Carolina-based unit that's currently stateside, has just three of its nine aircraft ready to fly. Its pilots averaged 4.5 flight hours in the last reporting period.

Following the fatal helicopter crash in

COMPETING FOR PARTS

A top lawmaker was recently up in arms when he said he learned that Marine aviation squadrons are using parts from museums in order to keep their aircraft flying.

"I have heard firsthand from service members who have looked me in the eye and told of trying to cannibalize parts from a museum aircraft … getting aircraft that were sent to the boneyard in Arizona back and ready to fly missions, pilots flying well below the minimum number of hours required for minimal proficiency," said House Armed Services Committee Chairman Mac Thornberry, R-Texas, at a March 22 hearing.

The Marines were eventually able to make the part they needed using a 3-D printer, said Lt. Gen. Jon Davis, deputy commandant for aviation.

"Marines will find parts." Davis told the Senate Armed Services Seapower Subcommittee on April 20. "They will find them on other airplanes and cannibalize. We don't want them doing that."

To help restore the CH-53E fleet, Congress has provided the Marine Corps with $360 million to refurbish and repair all of the service's 147 helicopters, said Salene, the MAG-29 commander.

"The second part, staying on step, is working with all of the naval aviation team to ensure we have the parts we need, the aircraft we need and most importantly, the training we need for our people so that we can remain America's 911 force," he said.

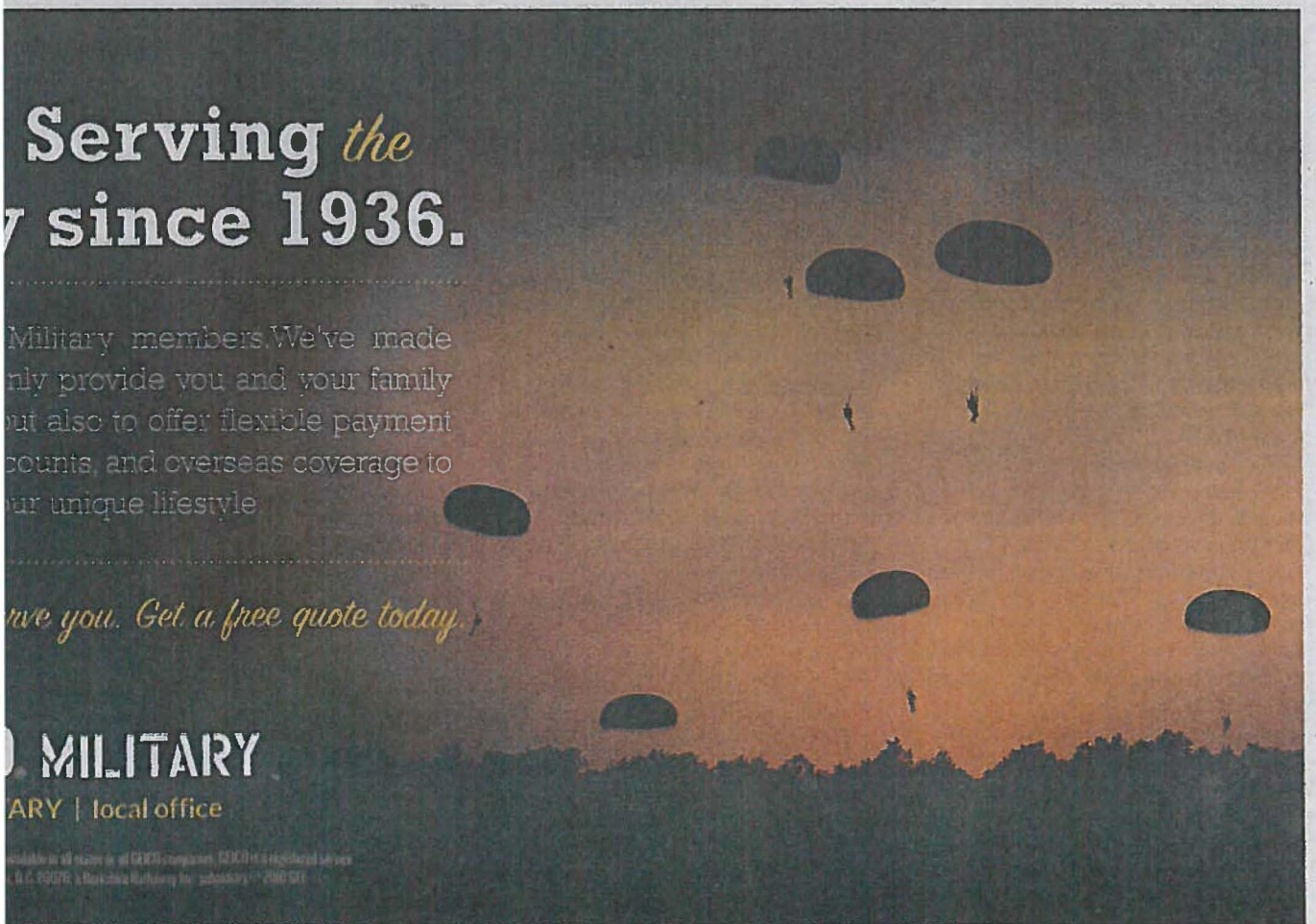
But getting spare parts is a challenge, Burns said. And when a fleet of Marines is competing for the same parts, the winner will be the unit closest to deploying.

"We do not have enough ready basic aircraft," she said. "That means we are not getting enough flight hours and we aren't up on our maintenance requirements for those specific aircraft."

> "Eight [flight] hours a month, that's completely irresponsible. … You're going to kill a lot of people if that's the new norm."
>
> Retired Navy Cmdr. Chris Harmer

The Marine Corps has requested

See **MISSION CAPABLE** next page



MISSION CAPABLE From previous page

another $460 million from Congress next fiscal year to address readiness shortfalls. Some of that money would buy spare parts for Marine aircraft.

'INGENUITY ONLY GETS US SO FAR'

While Davis said getting parts for aging aircraft like AV-8B Harriers is top on his priority list, so are parts for brand-new planes, like the F-35 joint strike fighter.

"We've got these great, brand new airplanes but sometimes we don't have the parts we need to get to full readiness," he said.

Seeing newer aircraft with mission-capable rates as low as some of the Marine Corps' oldest planes or helicopters is a red flag, said a retired Marine pilot and Iraq War veteran, who spoke on the condition of anonymity since he works in the aviation industry. That includes several critical aircraft that Marines fly, like the new versions of the Super Cobra or Hercules.

Mission-capable rates for the AH-1Z have fallen from 74.2 percent to 52.2 between fiscal years 2009 and 2015. During that same period, mission-capable rates for the KC-130T fell from 70.7 percent to 68.1.

While Marines are known for doing more with less, Burns said it poses challenges with Marines identify needed repairs, only to find they're competing with everyone else in need of the same parts.

"We can realistically only look Marines in the eyes so many times and ask them to do one more thing for America, knowing that unless something changes, we will just be asking them again," she said. "Ingenuity only gets us so far, however, we are equipped to fight our current battles, but our units at home who are on the bench are hurting the most."

At a time when the service is trying to retain its top talent amid an improving economy, those types of frustration can drive Marines out of the Corps. Marines who completed an annual retention survey last year cited a lack of job satisfaction as the fourth-highest reason for wanting to leave the Corps in 2015, up from the No. 6 spot in 2014.



Lance Cpl. Moses Roman, a tiltrotor mechanic, replaces a blade on an MV-22B Osprey. Marine leaders and members of Congress are concerned about the state of the Corps' aircraft.

CPL. JUSTIN GLANDON-HALL/MARINE CORPS

The reasons behind the steep declines in mission-capable rates can vary widely by aircraft, according to officials at Fleet Readiness Center Southwest at Naval Air Station North Island, California. About 30 percent of the center's workload is devoted to repairing Marine aircraft.

F/A-18 Hornets require the most maintenance due to its age and frequent support in accomplishing naval and Marine Corps missions, said Mike Grice, the systems engineering department head there. Hornets are susceptible to cracks and corrosion, he added.

Since the CH-53E is out of production, there can be delays in getting needed parts, said John Olmstead, a spokesman for Fleet Readiness Center East at Cherry Point, North Carolina. They are sometimes required to make certain parts in-house, he said, which can take a while.

The situation became dire when across-the-board spending cuts known as sequestration hit in 2013, Olmstead said. The readiness center was not able to hire replacements for artisans who retired or took jobs elsewhere, and it could not order badly needed maintenance materials or spend money to fix equipment at the center, he said.

"This meant no preventive maintenance on plant equipment. That led to many machines being down for extended periods of time," Olmstead said. "This inhibited our ability to produce parts, further slowing our turnaround time. Both issues continue to impact our throughput and cost."



CPL. JOSHUA BROWN/MARINE CORPS

A Marine inspects the blades on an MV-22B Osprey while at sea. The Osprey's mission-capable rates increased slightly between fiscal 2009 and 2015.

The retired Marine pilot who works in the aviation community said he's particularly concerned about readiness rates for the CH-53E. The heavy-lift helo is a workhorse for the Marine Corps, and the mission-capable rates, which dropped from 63.6 percent at the end of fiscal 2009 to 46 percent at the end of 2015, "look horrible," he said.



"The [mission-capable] rate should be 70 percent," he said. "...They're not hitting it. They're not coming close to it at all."

REVERSING THE TRENDS

When the threat of sequestration first hit in 2013, then-Commandant Gen. James Amos and his top adviser for the budget at the time, Lt. Gen. John Wissler, warned different audiences in Washington about the possible fallout.

Amos said at the time that "only two-thirds of our aviation combat units will be at readiness levels required for overseas deployment; decreased readiness will compound in 2014 and beyond." Wissler said entire F/A-18 fighter squadrons could be shut down. Fewer available aircraft would mean less flight time for pilots — and if Marines weren't training to fly, he said they could become a liability.

Harmer, the retired Navy commander and former Seahawk pilot instructor, said Congress has forced the military to cut training and operations budgets because they were not allowed to take money from elsewhere, such as pay and benefits.

"This is a problem the Marine Corps itself cannot address," he said. "The president and Congress have committed us to an operations regime overseas and not financed a training regime for stateside and then basically said to the Marines, 'You guys figure it out.' There's



LANCE CPL. AUSTIN LEWIS/MARINE CORPS

Marines troubleshoot issues with an F/A-18 Hornet engine. Fewer Hornets were mission capable at the end of fiscal 2015 compared with rates seven years prior.

nothing to figure out. There's no way for the Marines to reallocate funding that just isn't there."

While lawmakers have taken steps to ease the cuts since 2013, neither Congress nor President Obama seem willing to permanently fix the damage sequestration has done to readiness.

As things now stand, the Marine Corps does not expect to return to optimal aviation readiness levels until at least 2020 — assuming the service gets all the money it needs between now and then, Paxton told members of the House March 3.

But the Marines may have to face another budget shock. Unless lawmakers reach a compromise, sequestration spending levels will return in fiscal 2018, when a two-year budget deal expires, said Jesse Sloman, a research assistant with the Center for Strategic and Budgetary Assessments think tank in Washington, D.C.

That would sink the Marine Corps' plan to fix the damage to aviation units by 2020, Sloman said.

"If we went into another sequester, I think it would be disastrous," he said.

Commandant Gen. Robert Neller has called aviation readiness his "No. 1 concern," but said it will take a couple years for the Marine Corps to get more flight hours for pilots and enough spare parts for maintainers to keep planes and helicopters in the air.

For now, Congress needs to provide more funding to the Marine Corps and other services so they keep aircraft flying, said Virginia Republican Rep. Rob Wittman, chairman of the House Armed Services Readiness Subcommittee.

"It requires that we fully fund readiness accounts … that include flying hours, that include parts and inventory of parts, including maintenance schedules and maintainers," he told Marine Corps Times.

Past experience has shown that when defense budgets are cut, spare parts become harder to come by and mission-capable rates decline, Wittman said.

"When you don't have those resources, you have to prioritize and there are fewer aircraft that are available," he said. "Sometimes, in order to get critical parts, you do need to go to other aircraft."

If Marine units aren't in the lineup to deploy, they have the hardest time getting spare parts, Wittman said.

"We've seen that happen in the past," he said. "We've seen it every time we go through a reset, whether it's back post-Vietnam War, post Carter administration, wherever we may be. All of us want to believe that the lessons have been learned and we don't need to repeat that."



(b) (5)

(b) (5)

UNITED STATES MARINE CORPS
1ST MARINE AIRCRAFT WING
UNIT 37101
FPO AP 96373-7101

IN REPLY REFER TO:
3700
G-3
26 MAR 2014

From: Commanding General, 1st Marine Aircraft Wing
To: Commanding Officer, Marine Aircraft Group 24

Subj: WAIVER OF HIGH-BIRD REQUIREMENT IN USAG-HI TFTA

Ref: (a) WgO 3700.1D
(b) USAG-HI Installation IASC SOP 31 May 11

1. Background. Section 3304, paragraph 3 of reference (a) requires that a high-bird accompany all flights conducting low level, contour, or Nap-of-Earth (NOE) flight operations.

2. Effective immediately, 1st MAW aircraft are authorized to conduct low level, contour, and NOE flight operations on the Yellow and Black routes of the U.S. Army Garrison, Hawaii (USAG-HI) Tactical Flight Training Area (TFTA) without an accompanying high-bird in accordance with reference (b) when Lightning Radio is operational. When Lightning Radio is closed, a high-bird is required in accordance with reference (a).

(b)(6), (b)(3)

ENCLOSURE (23)