



SQUADRON D-11N TRAINING

Module 5, Patrol/SAR Log

Developed by Skip Morford



U.S. COAST GUARD AUXILIARY



Patrol Plan

This form is information given to Air Station, and Sector, by phone to each, just prior to takeoff. The calls are made after crew patrol briefing.

The numbers for Sector are -- 1-415-399-3451 -- 1-451-399-3520

The number for Air Station is – 1-650-808-2902

The contact cell number is to be decided by the crew

Departure airport where you taking off from and returning

Take off time is approximate

Duration of flight is on the flight schedule

Frequency monitored are always 21A primary and 16 secondary

1st landing to be decided by PIC (for lunch and fuel) if needed

Final landing is airport where patrol started

Significant events/sightings are also reported after patrol, on the last phone call to Sector and Air Station

Duty stander name is optional, signature is optional.



Patrol Plan-complete

AIR AUXILIARY PATROL REPORT

DATE/TIME 1/24/14 ---10:00 RISK ASSESMENT --COLOR GRN# 10

PARTOL TYPE Bravo

PILOT IN COMMAND Wheeler

CONTACT PHONE NUMBER 1-925-784-2141

NAMES CREW/PASSENGERS

1. Morford
2. Pasqual
3. _____
4. _____
5. _____
6. _____

DEPARTURE AIRPORT Livermore

TAKE OFF TIME 10:00 DURATION OF FLIGHT 5.0

FREQS. MONITORED--PRIMARY 21A SECONDARY 16

1st LAND TIME (LUNCH)/LOCATION Petaluma

FINAL LAND TIME/LOCATION Livermore

SIGNIFICANT EVENTS/SIGHTINGS

Report events recorded on the Patrol Log to Sector and
Air Station during the last phone call.

DUTY STANDER'S NAME _____

DUTY STANDERS SIGNITURE _____



Patrol Log

- “Patrol Log is to document observations made, the time and location of observations, and latitude and longitude (or geographical location) of any event and of radio reports made.”(ref. B.12.a) Aviation Training Manual



Patrol Log -blank

USCG Auxiliary Flight Log

MSN:		DATE:	ORDER NO:
		TAIL NO:	
		ENGINE TACH TIME	
CREW MEMBERS		AUX NUMBER	STOP TIME
1. (P)			START TIME
2.			TOTAL TIME
3.		FACILITY USE TIME	
4.			USE ENDED
5.			IN USE
6.			TOTAL TIME
TIME	CONTACT	LAT. & LONG.	MESSAGE OR ACTION



PATROL LOG INSTRUCTIONS

MSN -- type of patrol, (Alpha, Bravo, Charlie, Delta, Echo)

ORDER # -- found on flight schedule

TAIL # -- found on flight schedule

PILOT NAME – found on flight schedule

PRIMARY OBSERVER – found on flight schedule

CREW MEMBERS – if known add before the patrol, if not wait till arriving at airport

AUX MEMBER – if known add before the patrol, if not wait till arriving at airport

This information should be filled out before arriving at airport for patrol

FACILITY USE TIME – in use , when all the crew arrives at airport – use ended time after debriefing, calls to Sector and Air Station, aircraft is put away.

ENGINE HOBBS TIME – start time -- before engine starts

stop time – last time engine stops at end of patrol

TIME -- recorded for all entries on log

CONTACT –who radio call was made to, (Sector, boat stations, aux vessels)

LAT. & LONG. – present location

MESSAGE – what was reason or message of the call on the radio

SIGNIFICANT SIGHTINGS-REPORTED/LOGGED IMMEDIATELY.



OTHER ENTRIES ON LOG – engine start, engine stop, recorded every time engine start and stop occurs.

TAKE OFF TIME – given to Sector upon opening guard – given to pilot for his flight plan opening

Record times for opening guard, closing guard for lunch and fuel, resuming guard after Lunch and fuel stop, securing guard at end of patrol

All entries in RED are used by the pilot when filling out the AOM report.

This is an example of the filling out the Patrol Log.



USCG Auxiliary Flight Log

MSN: BRAVO		DATE: 1/15/14		ORDER NO:	28873
		TAIL NO: N2260S		ENGINE TACH TIME	
CREW MEMBERS		AUX NUMBER		STOP TIME	183.4
1. (P) Wheeler		1193126		START TIME	180.2
2. Morford		1213839		TOTAL TIME	3.2
3. Pasqual		1232616		FACILITY USE TIME	
4.				USE ENDED	15:30
5.				IN USE	09:30
6.				TOTAL TIME	6.0
TIME	CONTACT	LAT. & LONG.	MESSAGE OR ACTION		
0955		Livermore	Start engine		
10:10		Livermore	Take off		
10:12	Sec SF	Livermore	Open guard		
10:27	Sec SF	38*01 / 122*16	Ops. normal		
Continue Ops. Normal reports every 15 minutes					
11:35	Sec SF	Petaluma	Close guard/ landing		
11:45		Petaluma	Stop engine		
13:31		Petaluma	Start engine		
13:42	Sec SF	Petaluma	Resume guard		
13:57	Sec SF	37*23 / 122*32	Ops. normal		
Continue Ops. Normal reports every 15 minutes					
14:44	Sec SF	Livermore	Landing- Secure Guard		
14:55		Livermore	Stop engine		



USCG Auxiliary Flight Log

MSN: BRAVO		DATE: 12-11-13	ORDER NO: 27171
		TAIL NO: N 22605	Fuel - 61.5 - 18.6 = 42.9
		ENGINE TACH TIME	
CREW MEMBERS		AUX NUMBER	STOP TIME 175.8
1. (P)	WHEELER	1193126	START TIME 172.6
2.	MORFORD	1213839	TOTAL TIME 3.2
3.	PASQUAL	1232616	FACILITY USE TIME
4.			USE ENDED
5.			IN USE 0930
6.			TOTAL TIME
TIME	CONTACT	LAT. & LONG.	MESSAGE OR ACTION
1000		KLK	START ENGINE
1014		KLK	TAKE OFF
1017	Sec SF	KLK	OPEN GUARD
1032	Sec SF	38°00-122°20	OPS NORMAL
1047	Sec SF	37°58-123°00	OPS NORMAL #1
1102	Sec SF	38°28-123°11	OPS NORMAL - photo rocks
1117	Sec SF	38°46-123°31	OPS NORMAL #2
1131	Sec SF	38°26-123°08	OPS NORMAL - photo rocks
1147	Sec SF	37°57-122°47	OPS NORMAL
1157	Sec SF	HARF MODAL BAY	CLOSE GUARD
1209		" " "	STOP ENGINE
1319		" " "	START ENG
1326		" " "	T/O
1332	SSF	57 HAF	OPEN GUARD
1349	SSF	3659 12211	OPS NML
1358	SSF	WATSONVILLE	OPS NML
1413	SSF	57 LVK	SECURE GUARD
1419		LVK	END
1423	-	LVK	ENGINE STOP



Patrol Log Value

- Follow up by Coast Guard for potential rescue/distress cases, violations e.g. oil spills, Homeland Security concerns, navigations aids missing.
- Pilots use data for completing an AOM patrol report for 1) credit for all crew, 2) reimbursement, and, 3) most importantly significant sightings during the patrol.



SAR Log-Details

AUXAIR SAR Job Aid

Information:

Where is CSP
What kind of Pattern
Dimensions of Search Area
Length of Legs
Orientation of Legs
Track Spacing
Direction of First Turn
CSP
Planned On Scene Time
Planned Search Speed (normally 90kts)
Search Object - Characteristics, Color, Size, etc

Determine:

Time to get on Scene
Required endurance - Fuel, Light - to complete the search and RTB with adequate reserves
Available Endurance - How much Time will you have on Scene to search or loiter
 $T = A / S \times V$ or $A = V \times S \times T$
Bingo Time - Time to RTB w/ minimum adequate reserves
Check necessary PPE Safety Gear

Record:

Time Notified
Time Underway to Scene (CSP)
Time on Scene
Time of Significant Sightings
Time Departing Scene
On Scene Weather
Distance to Scene (CSP)
Distance from closest land
Case Number

Report:

When en-route to Search Area
When On Scene
On Scene Weather as it affects the search
Any Significant Sightings
When Search is Completed - Ask for any further tasking before departing Scene
If departing scene before search is completed (due to fuel state or VIX) report amount of search completed - # of legs, etc.

While Searching

Maintain hard deck of 500ft AGL
Maintain Situational Awareness
Look out for:
Scattered wreckage, canvas, debris, oil slicks
Signals - Sea Dye Markers, Mirror Flashes, Pyrotechnics, Smoke
Lifeboats, Rafts, People in Water

Remember:

Notify ATC of your Search - Use RESCUE call sign
Squawk 1277 - unless instructed otherwise
90 kts = 1.5 NM per minute
At 90 kts, a Standard Rate Turn (3 deg/sec) has a radius of .50 NM
Monitor 121.5 & CH 16 if able
Any Questions? ASK!

After RTB:

Phone Air Station & Group to give SITREP
Complete 7034 SAR Incident Report
Complete Patrol report and other reports as usual



WHEN ON A SAR

- Time that the aircraft arrives in the search area.
- Distance from the takeoff point to the search area.
- Time and location of ANY significant sightings.
- On scene weather (wind speed and direction, visibility, wave height, and direction of wave movement)

This information is to be recorded on the Patrol Log and in radio call to Command Center



WHEN ON A SAR

- If search object is located, log time on scene and time departing scene.
- Areas searched including altitude and search patterns flown.
- Hours of search.
- Engine stop time.
- Total hours flown.

This information is to be recorded on the Patrol Log and in radio calls to Command Center.



SAR GUIDE

- Time notified
- Time underway to scene
- Distance to scene
- Available endurance on scene
- Time on scene
- On scene weather
- What type of pattern will be used



SAR GUIDE

- Time of significant sightings
- Time departing scene
- Case number
- After RTB phone Air Station and Sector to give SITREP and obtain SAR case #.
- Complete 1034 SAR incident report (Misle)??
- Complete Patrol report and other reports as usual



NOAA After Patrol Report

**USCG D11N AuxAir Squadron
NOAA MBNMS Report Form**

PATROL DATE 1-7-14 START TIME 10:03 END TIME 14:25
 REPORTER'S NAME MORFORD TELEPHONE 925 784-2141 EMAIL skipat5346c
 AIRCRAFT # A1226DS PILOT'S NAME WHEELER
 OTHER CREW MEMBERS BARNETT
 AREA(S) PATROLLED WITHIN MBNMS GOLDEN GATE TO MOSS LANDING

PLEASE INDICATE NUMBER OF SUBJECTS OF INTEREST OBSERVED IN EACH CATEGORY, EVEN IF THE NUMBER IS ZERO. PHOTOGRAPH ALL SUBJECTS OBSERVED IF POSSIBLE.

<input checked="" type="checkbox"/> MPWCs OUTSIDE OF MPWC ZONES,* p. 7	<input type="checkbox"/> LARGE CARGO VESSELS INSHORE OF IMO VESSEL TRACKS,* p. 12
<input checked="" type="checkbox"/> SALVAGE OR OTHER VESSELS DEPLOYING EQUIPMENT OR REMOVING ITEMS*	<input type="checkbox"/> VESSELS HARASSING OR WITHIN TWO BOAT LENGTHS OF WHALES OR WHITE SHARKS*
<input checked="" type="checkbox"/> AIRCRAFT BELOW 1000' IN OVERFLIGHT ZONES,* p. 9	<input type="checkbox"/> SHORLINE CONSTRUCTION OR MAINTENANCE
<input checked="" type="checkbox"/> ENTANGLED WHALES, DOLPHINS, ETC.*	<input type="checkbox"/> ABANDONED OR GROUNDED VESSELS*
<input checked="" type="checkbox"/> ANY FISHING ACTIVITIES OR FLOATS IN STATE MPAs,* pp. 14-39	<input type="checkbox"/> OTHER

*IMMEDIATELY NOTIFY OFFICER BOB YERENA BY CONTACTING USCG STATION MONTEREY ON 23A, AND ALSO INCLUDE DETAILS IN THIS REPORT

- RECORD TIMES IN 24-HOUR LOCAL TIME
- MULTIPLE HIGH-RESOLUTION PHOTOS OF SUBJECTS OF INTEREST ARE REQUESTED
- CONSULT NOAA MBNMS AIR PATROL GUIDE (USCG AUX EDITION) FOR DETAILS OF REGULATIONS, MAPS AND PAGE NUMBER REFERENCES
- UPON COMPLETION OF PATROL, FAX OR SCAN-AND-EMAIL THIS REPORT SHEET TO ROBERT YERENA, robert.yerena@uscg.mil, VOICE: 831-647-4203, FAX: 831-647-4205 AND SCOTT KATHEY, scott.kathey@noaa.gov, VOICE: 831-647-4251 FAX: 831-647-4250
- REPORT SUSPECTED VIOLATIONS (MARKED BY * ABOVE) IMMEDIATELY BY CONTACTING USCG STATION MONTEREY ON CHANNEL 23A.

SUBJECT OF INTEREST OBSERVATIONS FROM - 37°45' - 122°29' to
 TIME 11:15 LAT/LONG AND GEOG LOCATION 37°28' - 122°29'
 DESCRIPTION OF SUBJECT, IDENTIFYING MARKS, NAMES, NUMBERS AND ACTIVITY
1 TANKER - 1 TUG WITH BARGE - 1 FISHING VESSEL - 8 FISHING BOATS RETURNING TO PILLAR POINT HARBOR
 SPEED AND DIRECTION OF TRAVEL _____

USCG D11N AuxAir Squadron NOAA Report Form-v130119.doc

SUBJECT OF INTEREST OBSERVATIONS FROM - 37°28' - 122°30' to
 TIME 1319 LAT/LONG AND GEOG LOCATION 37°06' - 122°20'
 DESCRIPTION OF SUBJECT, IDENTIFYING MARKS, NAMES, NUMBERS AND ACTIVITY
1328 - WHALE SIGHTING - 37°18' - 122°25'
3 FISHING BOATS AT VARIOUS LOCATIONS
 SPEED AND DIRECTION OF TRAVEL 150 SOUTH BOUND

SUBJECT OF INTEREST OBSERVATIONS FROM - 37°06' - 122°25' to
 TIME 1335 LAT/LONG AND GEOG LOCATION 37°56' - 121°59'
 DESCRIPTION OF SUBJECT, IDENTIFYING MARKS, NAMES, NUMBERS AND ACTIVITY
2 FISHING VESSELS NEAR SANTA CRUZ,
VARIOUS LOCATIONS
 SPEED AND DIRECTION OF TRAVEL 150 - SOUTH BOUND

SUBJECT OF INTEREST OBSERVATIONS
 TIME _____ LAT/LONG AND GEOG LOCATION _____
 DESCRIPTION OF SUBJECT, IDENTIFYING MARKS, NAMES, NUMBERS AND ACTIVITY

 SPEED AND DIRECTION OF TRAVEL _____

SUBJECT OF INTEREST OBSERVATIONS
 TIME _____ LAT/LONG AND GEOG LOCATION _____
 DESCRIPTION OF SUBJECT, IDENTIFYING MARKS, NAMES, NUMBERS AND ACTIVITY

 SPEED AND DIRECTION OF TRAVEL _____

This report is made after patrol. Information reported is Half Moon Bay south into Charlie Sector. Number for contact is on the form.