LONG BEACH FIRE DEPARTMENT
Marine Safety Division

TRAINING ACTION PLAN

A-Shift Submersion Drill

Operational Period

Date From: 06/17/2024 Date To: 06/17/2024

Time From:1000 Hours Time To: 1300 Hours

Approved By Incident Commander:

Rank, First Initial, Last Name

INCIDENT OBJECTIVES (ICS 202)

1. Incident Name:	2. Operational Period: Date From: 06-17-2024 Date To: 06-17-2024 Time From: 1000 Time To: 1300
A-Shift Submersion Drill	

3. Objective(s):

Line Search and Primary Search for simulated submerged victims

- Conduct witness interview to determine the two PLS

- Initiate line search with area guards to recover submerged swimmer near the shore. Recover to the beach.

- Primary search conducted by area Sergeant to recover victim outside the swim area to the rescue boat.

  -Don PPE and RDU
  -Enter water from the beach
  -Set PLS marker buoy
  -Primary search around the PLS
  -Simulate response over channel 4

-This drill is to simulate a double submersion near the beach. Beach guards will utilize an organized line search to recover one victim.
Divers will utilize a primary search pattern to locate one victim.
- Follow Directions of Rescue Boat Captain and Deckhand on and around the rescue boat
- Controlled Ascent with awareness of surroundings
- Surface with 500 psi minimum

4. Operational Period Command Emphasis:

- Participants must attend the the Safety briefing
- If an accident should occur the IC shall be notified immediately. Use "EMERGENCY RADIO TRAFFIC" as necessary
- Breathing Compressed air is dehydrating, hydrate pre and post diveUtilize safe practices in carrying out the mission
- Employ clear communication
- Facilitate networking between agencies

General Situational Awareness

- Expected depth of 10 to 15 feet.
- Expected low visibility

5. Site Safety Plan Required? Yes ☐ No ☒

Approved Site Safety Plan(s) Located at:

6. Incident Action Plan (the items checked below are included in this Incident Action Plan)**:**

☐ ICS 203	☐ ICS 207	Other Attachments:	
☐ ICS 204	☒ ICS 208	☒	Long Beach Dive Team Dive Plan
☒ ICS 205	☐ Map/Chart	☒	LBFD Training Roster
☐ ICS 205A	☐ Weather Forecast/Tides/Currents	☒	Noaa Dive Table
☒ ICS 206		☒	LBFD Repetitive Dive Log

7. Prepared by: Name: Wawrzynski Position/Title: RBO / Dive Sup. Signature: _____

8. Approved by Incident Commander: Name: _____ Signature: _____

ICS 202	IAP Page 1	Date/Time: 06-2-2024

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

1. Incident Name:	2. Date/Time Prepared:	3. Operational Period:
A-Shift Submersion Drill	Date: 06-2-2024 Time:	Date From: 06-17-2024 Date To: 06-17-2024 Time From: 1000 Time To: 1300

4. Basic Radio Channel Use:

Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode (A, D, or M)	Remarks
	4	Command	Fire 4	Dive Group						
	1	Emergency	Fire 1	Medical Group						
	A	Tactical		Divers						RDU dive no through water coms.
	16/22	USCG		Resource Group						

5. Special Instructions:

- Surface OPS. on FIRE 4
- Emergency resources FIRE 1
- VHF 16/22 for USCG

6. Prepared by (Communications Unit Leader) Name: Wawrzynski Signature: _____

ICS 205	IAP Page _____	Date/Time: 06-2-2024

MEDICAL PLAN (ICS 206)

1. Incident Name:	2. Operational Period: Date From: 06-17-2024 Date To: 06-17-2024 Time From: 1000 Time To: 1300
A-Shift Submersion Drill	

3. Medical Aid Stations:

Name	Location	Contact Number(s)/Frequency	Paramedics on Site?
Rescue Boat 2	On Scene	LOB V-4 / VHF -16	☐ Yes ☒ No
LG6 & LG7	On the Beach	LOB V-4 / LOB V-1	☐ Yes ☒ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

4. Transportation (indicate air or ground)**:**

Ambulance Service	Location	Contact Number(s)/Frequency	Level of Service
LBFD	Beach Ops	LBFD V-1	☒ ALS ☐ BLS
LACO Sheriff Air Rescue 5			☒ ALS ☐ BLS
USCG, Air Ops		(650) 784-8904	☐ ALS ☒ BLS
			☐ ALS ☐ BLS

5. Hospitals:

Hospital Name	Address, Latitude & Longitude if Helipad	Contact Number(s)/ Frequency	Travel Time		Trauma Center	Burn Center	Helipad
			Air	Ground			
Long Beach Memorial	2801 Atlantic Ave, Long Beach, CA 90807	(562) 933-2000	5	15	☒ Yes ☐ No Level:_____	☐ Yes ☐ No	☒ Yes ☐ No
Catalina Chamber	1 Big Fisherman Cove Avalon	(310) 510-1053	10		☐ Yes ☐ No Level:_____	☐ Yes ☒ No	☒ Yes ☐ No
					☐ Yes ☐ No Level:_____	☐ Yes ☐ No	☐ Yes ☐ No
					☐ Yes ☐ No Level:_____	☐ Yes ☐ No	☐ Yes ☐ No
					☐ Yes ☐ No Level:_____	☐ Yes ☐ No	☐ Yes ☐ No

6. Special Medical Emergency Procedures:

- All patients will be assesed for barotrauma, and transported to the chamber at Isthmus if required per medical direction.

☐ Check box if aviation assets are utilized for rescue. If assets are used, coordinate with Air Operations.

7. Prepared by (Medical Unit Leader)**:** Name: Wawrzynski Signature: _____

8. Approved by (Safety Officer)**:** Name: _____ Signature: _____

ICS 206	IAP Page _____	Date/Time: 06-2-2024

SAFETY MESSAGE/PLAN (ICS 208)

1. Incident Name:	2. Operational Period: Date From: 06-17-2024 Date To: 06-17-2024
A-Shift Submersion Drill	Time From: 1000 Time To: 1300

3. Safety Message/Expanded Safety Message, Safety Plan, Site Safety Plan:

- Participants must attend the Safety briefing
- Any Participant my suspend the drill due to safety concerns; at the discretion of the Dive Officer the exercise may be terminated
- If an accident should occur notify the IC or Instructor immediately. Use "EMERGENCY RADIO TRAFFIC" as necessary
- Dive equipment / gear must be in excellent working condition in order to participate in exercise
- Divers shall inspect their buddy's equipment prior to entering the water
- Participants will act in a responsible manner at all times during this exercise
- Divers will maintain buddy disipline with NO EXCEPTIONS
- Never hold your breath while diving on compressed air
- Always make eye contact with the deckhand when approaching the Rescue Boat
- Follow instructions from the deckhand when embarking / disembarking the swim step
- Clear you ears early and often
- Participants on SCUBA will return to the surface with not less than 500 psi at the completion of the dive exercise
- Table profiles will be monitored pre and post dive
- Always maintain situational awareness, IF YOU SEE SOMETHING SAY SOMETHING! Our safety is everyones concern.
- If you get separated from your buddy search for no more than a minute, then safely surface.

4. Site Safety Plan Required? Yes ☐ No ☒

Approved Site Safety Plan(s) Located At:

5. Prepared by: Name: Wawrzynski Position/Title: RBO / Dive Supervis Signature: _____

ICS 208	IAP Page _____	Date/Time: 06-2-2024

Long Beach Fire Department Dive Team

Dive Plan

Date: 06-17-2024 **Location:** East Beach / West Beach **Dive Supervisor:** Wawrzynski

Depth: 15'		**Visibility:** 2 to 6 Ft.			**Temp:** 65 deg
Equipment:	☒ Wet	☐ Dry	☒ RDU	☐ SCUBA	☐ Surface Comms
Dive Type:	Training				
Hazards:	☒ Entanglement	☐ Overhead Environment		☐ Pollution	☐ Strong Current
	☐ Other:				

Dive 1	**Time:** 1015	**Dive 2**	**Time:** 1115	**Dive 3**	**Time:**
Divers:	Gonzales	Divers:	Jimenez	Divers:	
RIC:	Mathison	RIC:	Mathison	RIC:	
Start P.G.:	A	Start P.G.:	A	Start P.G.:	
Depth:	15 Ft.	Depth:	15 Ft.	Depth:	
Bottom Time:	10 Min.	Bottom Time:	10 Min.	Bottom Time:	
Safety Stop:	N/A	Safety Stop:	N/A	Safety Stop:	N/A
End P.G.:	A	End P.G:	A	End P.G.:	
Surface Interval:		Surface Interval:		Surface Interval:	
Coverage:	RB1 / LG-7 / ABM / Beach	Coverage:	RB1 / LG6 / ABM / Beach	Coverage:	

Notifications: ☐ USCG (310) 521-3815 ☐ Catalina Hyperbaric Chamber (310) 510-4020

Dive Description/Sketch: Submersion Drill
Line search and primary search for simulated submerged victims

Objectives:
- Conduct witness interview to determine the two PLS

- Initiate line search with area guards to recover submerged swimmer near the shore. Recover to the beach.

- Primary search conducted by area Sergeant to recover victim outside the swim area to the rescue boat.
  - -Don PPE and RDU
  - -Enter water from the beach
  - -Set PLS marker buoy
  - -Primary search around the PLS
  - -Simulate response over channel 4

Coverage Assignments:

- 1000 LG7 cover west and east
- 1100 LG6 cover east and west

NOAA NO-DECOMPRESSION TABLE
MULTIPLE AIR DIVES

WARNING: EVEN STRICT COMPLIANCE WITH THESE CHARTS WILL NOT GUARANTEE AVOIDANCE OF DECOMPRESSION SICKNESS. CONSERVATIVE USAGE IS STRONGLY RECOMMENDED.

RNT RESIDUAL NITROGEN TIME
+ ABT ACTUAL BOTTOM TIME
ESDT EQUIVALENT SINGLE DIVE TIME

(USE ESDT TO DETERMINE END-OF-DIVE LETTER GROUP)

THESE CHARTS ARE BASED ON THE U.S. NAVY AIR DECOMPRESSION TABLES 7, 8, & 9 REV. 6

CHART 1 — DIVE TIMES WITH END-OF-DIVE GROUP LETTER

DEPTH msw	DEPTH fsw	00 MAXIMUM NO-STOP TIME	DIVE TIME REQUIRING DECOMPRESSION STOP — MINUTES REQUIRED AT 20 fsw (6.1 msw)																00
12.2	40	12	20	27	36	44	53	63	73	84	95	108	121	135	151	163	180		14
13.7	45	11	17	24	31	39	46	55	63	72	82	92	102	114	125	130	150		2 25
15.2	50	9	15	21	28	34	41	48	56	63	71	80	89	92	100	110	130		4 8 34
16.8	55	8	14	19	25	31	37	43	50	56	63	71	74	80	90	100			4 10 17
18.3	60	7	12	17	22	28	33	39	45	51	57	60	65		80	90			2 14 23
21.3	70	6	10	14	19	23	28	32	37	42	47	48	55	60	70				9 14 24
24.4	80	5	9	12	16	20	24	28	32	36	39	45		50	60				10 17 30
27.4	90	4	7	11	14	17	21	24	28	30	35		40	45					4 14 23
30.5	100	4	6	9	12	15	18	21	25		30		35	40					3 15 26
33.5	110	3	6	8	11	14	16	19	20	25		30		35					3 14 27
36.6	120	3	5	7	10	12	15		20		25		30						2 8 24
39.6	130	2	4	6	9	10		15		20		25							1 4 17

fsw	40	45	50	55	60	70	80	90	100	110	120	130	GROUP LETTER
msw	12.2	13.7	15.2	16.8	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	
REPETITIVE DIVES SHALLOWER THAN 40 FSW (12.2 MSW) ARE TO USE THE 40 FSW (12.2 MSW) REPETITIVE SCHEDULE	13 150	12 113	11 81	10 64	9 51	8 40	7 32	6 24	5 20	5 15	5 10	4 6	A
	21 142	18 107	17 75	15 59	14 46	12 36	10 29	9 21	8 17	8 12	7 8	6 4	B
	29 134	25 100	23 69	20 54	19 41	16 32	14 25	12 18	11 14	10 10	9 6	9 1	C
	37 126	32 93	29 63	26 48	24 36	20 28	18 21	16 14	14 11	13 7	12 3		D
	45 118	40 85	35 57	32 42	29 31	25 23	22 17	19 11	17 8	16 4	14 1		E
	55 108	48 77	42 50	38 36	35 25	29 19	25 14	22 8	20 5	18 2			F
	64 99	56 69	49 43	44 30	40 20	34 14	29 10	26 4	23 2				G
	74 89	64 61	57 35	51 23	46 14	39 9	33 6	29 1					H
	85 78	73 52	65 27	58 16	52 8	44 4	38 1						I
	97 66	83 42	73 19	65 9	58 2								J
	109 54	93 32	81 11	72 2									K
	122 41	104 21	90 2										L
	136 27	115 10											M
	152 11												N
													O
													Z

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Z
2:20 :10	3:36 1:17	4:31 2:12	5:23 3:04	6:15 3:56	7:08 4:49	8:00 5:41	8:52 6:33	9:44 7:25	10:36 8:17	11:29 9:10	12:21 10:02	13:13 10:54	14:05 11:46	14:58 12:38	15:50 13:31
1:16 :10	2:11 :56	3:03 1:48	3:55 2:40	4:48 3:32	5:40 4:24	6:32 5:17	7:24 6:09	8:16 7:01	9:09 7:53	10:01 8:45	10:53 9:38	11:45 10:30	12:37 11:22	13:30 12:14	
:55 :10	1:47 :53	2:39 1:45	3:31 2:38	4:23 3:30	5:16 4:22	6:08 5:14	7:00 6:07	7:52 6:59	8:44 7:51	9:37 8:43	10:29 9:35	11:21 10:28	12:13 11:20		
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22	6:06 5:14	6:58 6:07	7:50 6:59	8:42 7:51	9:34 8:43	10:27 9:35	11:19 10:28			
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:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22	6:06 5:14	6:58 6:07	7:50 6:59	8:42 7:51						
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22	6:06 5:14	6:58 6:07	7:50 6:59							
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22	6:06 5:14	6:58 6:07								
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22	6:06 5:14									
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30	5:13 4:22										
:52 :10	1:44 :53	2:37 1:45	3:29 2:38	4:21 3:30											
:52 :10	1:44 :53	2:37 1:45	3:29 2:38												
:52 :10	1:44 :53	2:37 1:45													
:52 :10	1:44 :53														
:52 :10															

CHART 3 — REPETITIVE DIVE TIME

00 / 00 — RED NUMBERS (TOP) ARE RESIDUAL NITROGEN TIMES (RNT)
BLACK NUMBERS (BOTTOM) ARE ADJUSTED NO-STOP REPETITIVE DIVE TIMES
ACTUAL DIVE TIME SHOULD NOT EXCEED THIS NUMBER

CHART 2 — SURFACE INTERVAL TIME

Time Ranges in hours: minutes
Enter Chart 2 from the top, move down to find surface interval time, move left to find the next repetitive group letter.

PUBLIC SAFETY DIVE TEAM
REPETITIVE DIVE LOG

Date: June 17,2024 Location: East Beach / West Beach Dive Supervisor: Wawrzynski

Tables Used: Noaa Dive Type: Drill Dive Description: Submersion Drill

	SI	BEG. PG	STARTING PSI	TIME DOWN	MAX. DEPTH	TIME UP	SAFETY STOP	ENDING PSI	RES. NIT. TIME	TOTAL TIME	END PG
Gonzales											
Jimenez											
Mathison											

LONG BEACH FIRE DEPARTMENT
TRAINING DIVISION

ROSTER / SIGN-IN SHEET

Type of Training/ Drill:	Location: East Beach / West Beach	Date:
A-shift Submersion Drill	Time: 1000-1300	06/17/2024
Coordinator: Wawrzynski		

#	Print Last Name, First Name	Agency	Station / Shift	Signature