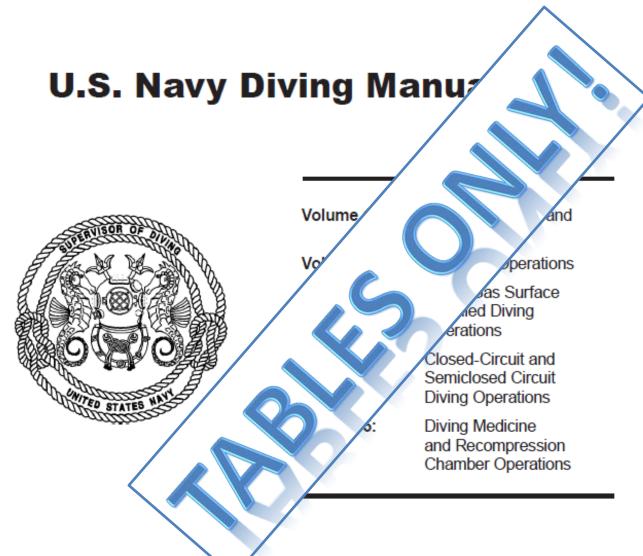
0910-LP-115-1921

**REVISION 7** 



DISTRIBUTION STATEMEN: THIS DOCUMENT HAS BEEN APPROVED FOR PUBLIC RELEASE AND SALE; ITS DISTRIBUTION IS UNLIMITED.

SUPERSEDES \$\$521-AG-PRO-010, REVISION 6 CHANGE A, Dated 15 October 2011.

PUBLISHED BY DIRECTION OF COMMANDER, NAVAL SEA SYSTEMS COMMAND

Table 9-6. Required Surface Interval Before Ascent to Altitude After Diving.

Repetitive				lı	ncrease in A	Altitude (feet	t)			
Group Designator	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
А	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
В	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	1:42
С	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	1:48	6:23
D	0:00	0:00	0:00	0:00	0:00	0:00	0:00	1:45	5:24	9:59
Е	0:00	0:00	0:00	0:00	0:00	0:00	1:37	4:39	8:18	12:54
F	0:00	0:00	0:00	0:00	0:00	1:32	4:04	7:06	10:45	15:20
G	0:00	0:00	0:00	0:00	1:19	3:38	6:10	9:13	12:52	17:27
Н	0:00	0:00	0:00	1:06	3:10	5:29	8:02	11:04	14:43	19:18
1	0:00	0:00	0:56	2:45	4:50	7:09	9:41	12:44	16:22	20:58
J	0:00	0:41	2:25	4:15	6:19	8:39	11:11	14:13	17:52	22:27
K	0:30	2:03	3:47	5:37	7:41	10:00	12:33	15:35	19:14	23:49
L	1:45	3:18	5:02	6:52	8:56	11:15	13:48	16:50	20:29	25:04
М	2:54	4:28	6:12	8:01	10:06	12:25	14:57	18:00	21:38	26:14
N	3:59	5:32	7:16	9:06	11:10	13:29	16:02	19:04	22:43	27:18
0	4:59	6:33	8:17	10:06	12:11	14:30	17:02	20:05	23:43	28:19
Z	5:56	7:29	9:13	11:03	13:07	15:26	17:59	21:01	24:40	29:15
Exceptional E	xposure				Wait 48	3 hours befor	re ascent			

NOTE 1 When using Table 9-6, use the highest repetitive group designator obtained in the previous 24-hour period.

NOTE 2 Table 9-6 may only be used when the maximum altitude achieved is 10,000 feet or less. For ascents above 10,000 feet, consult NAVSEA 00C for guidance.

NOTE 3 The cabin pressure in commercial aircraft is maintained at a constant value regardless of the actual altitude of the flight. Though cabin pressure varies somewhat with aircraft type, the nominal value is 8,000 feet. For commercial flights, use a final altitude of 8,000 feet to compute the required surface interval before flying.

NOTE 4 No surface interval is required before taking a commercial flight if the dive site is at 8,000 feet or higher. In this case, flying results in an increase in atmospheric pressure rather than a decrease.

NOTE 5 For ascent to altitude following a non-saturation helium-oxygen dive, wait 12 hours if the dive was a no-decompression dive. Wait 24 hours if the dive was a decompression dive.

**Table 9-5.** Repetitive Groups Associated with Initial Ascent to Altitude.

Altitude (feet)	Repetitive Group
1000	А
2000	A
3000	В
4000	С
5000	D
6000	Е
7000	F
8000	G
9000	Н
10000	I

From your new repetitive group and sea level equivalent depth, determine the residual nitrogen time associated with the dive. Add this time to the actual bottom time of the dive. If the diver has spent enough time at altitude to desaturate beyond repetitive group A in Table 9-8, no addition of residual nitrogen time to bottom time is needed. The diver is "clean."

**Example:** A diver ascends rapidly to 6000 feet in a helicopter and begins a dive to 100 fsw 90 minutes later. How much residual nitrogen time should be added to the dive?

From Table 9-5, the repetitive group upon arrival at 6000 feet is Group E. During 90 minutes at altitude, the diver will desaturate to Group D. From Table 9-4, the sea level equivalent depth for a 100 fsw dive is 130 fsw. From Table 9-8, the residual nitrogen time for a 130 fsw dive in Group D is 11 minutes. The diver should add 11 minutes to the bottom time.

Table 9-5 can also be used when a diver who is fully equilibrated at one altitude ascends to and dives at a higher altitude. Enter Table 9-5 with the difference between the two altitudes to determine the initial repetitive group.

**Example:** Divers equilibrated at a base camp altitude of 6000 feet fly by helicopter to the dive site at 10,000 feet. The difference between the altitudes is 4000 feet. From Table 9-5, the initial repetitive group to be used at 10,000 feet is Group C.

## **WARNING**

Altitudes above 10,000 feet can impose serious stress on the body resulting in significant medical problems while the acclimatization process takes place. Ascents to these altitudes must be slow to allow acclimatization to occur and prophylactic drugs may be required to prevent the occurrence of altitude sickness. These exposures should always be planned in consultation with a Diving Medical Officer. Commands conducting diving operations above 10,000 feet may obtain the appropriate decompression procedures from NAVSEA 00C.

 Table 9-7.
 No-Decompression Limits and Repetitive Group Designators for No-Decompression Air Dives.

Depth	No-Stop						F	Repetit	ve Gro	up De	signati	on					
(fsw)	Limit	Α	В	С	D	Е	F	G	Н		J	K	L	M	N	0	Z
10	Unlimited	57	101	158	245	426	*										
15	Unlimited	36	60	88	121	163	217	297	449	*							
20	Unlimited	26	43	61	82	106	133	165	205	256	330	461	*				
25	1102	20	33	47	62	78	97	117	140	166	198	236	285	354	469	992	1102
30	371	17	27	38	50	62	76	91	107	125	145	167	193	223	260	307	371
35	232	14	23	32	42	52	63	74	87	100	115	131	148	168	190	215	232
40	163	12	20	27	36	44	53	63	73	84	95	108	121	135	151	163	
45	125	11	17	24	31	39	46	55	63	72	82	92	102	114	125		
50	92	9	15	21	28	34	41	48	56	63	71	80	89	92			
55	74	8	14	19	25	31	37	43	50	56	63	71	74				
60	63	7	12	17	22	28	33	39	45	51	57	63					
70	48	6	10	14	19	23	28	32	37	42	47	48					
80	39	5	9	12	16	20	24	28	32	36	39						
90	33	4	7	11	14	17	21	24	28	31	33						
100	25	4	6	9	12	15	18	21	25								
110	20	3	6	8	11	14	16	19	20								
120	15	3	5	7	10	12	15										
130	12	2	4	6	9	11	12										
140	10	2	4	6	8	10											
150	8		3	5	7	8											
160	7		3	5	6	7											
170	6			4	6												
180	6			4	5	6											
190	5			3	5												

<sup>\*</sup> Highest repetitive group that can be achieved at this depth regardless of bottom time.

**Table 9-8.** Residual Nitrogen Time Table for Repetitive Air Dives.

above th	110   117   117   118   118   119   110   118   110   118   110   118   110   118   110   118   110   118   110   118   110   118															
lies.																
		ally dow	nward t	to the ne	w repet	itive gro	up desi	gnation.					_c>			
		ard in th	nis same	e columr	to the	row that	represe	ents		243	<b>,</b> _	D	:10	:53	1:48	3:04
the depth is residua		repetitiv	e dive. in mini	The time	given a	at the in	ersectio	on	٠,	nte.			:52	1:47	3:03	5:23 *
repetitive	_	en unie,	111 1111111	iles, lo l	e applie	שלו נט נוופ	7		FACE		E	:10 :52	:53 1:44	1:45 2:39	2:40 3:55	3:56 6:15 *
								, SV	'''' _		:10	:53	1:45	2:38	3:32	4:49
* Dives fo	-	surface	interva	Is longe	r than		-0	, o,	L		:52	1:44	2:37	3:31	4:48	7:08 *
this are r		titive div	es. Use	actual			.nhin	9	G	:10	:53	1:45	2:38	3:30	4:24	5:41
bottom ti Tables to		te decor	nnressi	on		26	<i>∄</i> ,,	-	.10	:52 :53	1:44 1:45	2:37 2:38	3:29 3:30	4:23 4:22	5:40 5:17	8:00 * 6:33
for such		to accor	iipi cooi	011	_	atb		_н>	:52	1:44	2:37	3:29	4:21	5:16	6:32	8:52 *
					COUP	•		:10	:53	1:45	2:38	3:30	4:22	5:14	6:09	7:25
	:52 1:44 2:37 3:29 4:21 5:13 6:08 7:24 9:44 * :10 :53 1:45 2:38 3:30 4:22 5:14 6:07 7:01 8:17															9:44 *
:10 :53 1:45 2:38 3:30 4:22 5:14 6:07 7:01 8:17 :52 1:44 2:37 3:29 4:21 5:13 6:06 7:00 8:16 10:36																
			200			:10	:53	1:45	2:38	3:30	4:22	5:14	6:07	6:59	7:53	9:10
			K		K	:52	1:44	2:37	3:29	4:21	5:13	6:06	6:58	7:52		11:29 *
				L	:10	:53	1:45	2:38	3:30	4:22	5:14	6:07	6:59	7:51		10:02
				:10	:52 :53	1:44 1:45	2:37 2:38	3:29 3:30	4:21 4:22	5:13 5:14	6:06 6:07	6:58 6:59	7:50 7:51	8:44 8:43		12:21 * 10:54
			_M >	:52	1:44	2:37	3:29	4:21	5:13	6:06	6:58	7:50	8:42	9:37		13:13 *
		N	:10	:53	1:45	2:38	3:30	4:22	5:14	6:07	6:59	7:51	8:43	9:35		11:46
_			:52	1:44	2:37	3:29	4:21	5:13	6:06	6:58	7:50	8:42	9:34	10:29		14:05 *
	0>	:10 :52	:53 1:44	1:45 2:37	2:38 3:29	3:30 4:21	4:22 5:13	5:14 6:06	6:07 6:58	6:59 7:50	7:51 8:42	8:43 9:34	9:35 10:27	10:28 11:21		12:38 14:58 *
	:10	:53	1:45	2:38	3:30	4:22	5:14	6:07	6:59	7:51	8:43	9:35	10:28	11:20	12:14	
_z>	:52	1:44	2:37	3:29	4:21	5:13	6:06	6:58	7:50	8:42	9:34	10:27	11:19	12:13	13:30	15:50 *
	7		N	NA											В	_
Dive	Z	0	N	М	L	K	J Group a	 	H d of the	G Surface	F Interv	E	D	С	В	А
Dive Depth	Z	0	N	M	1 1	1 1	1 1	1 1	1 1	G Surface	1 1		D	С	В	A
Depth 10	**	**	**	**	Re	petitive **	Group a	t the Er	nd of the	Surface **	1 1	427	246	159	101	58
<b>Depth</b> 10 15	**	**	**	**	** **	petitive ** **	Group a	at the Er	** 450	Surface ** 298	** 218	427 164	246 122	159 89	101 61	58 37
10 15 20	**	** **	** **	** **	** ** **	** ** 462	** ** 331	** ** 257	** 450 206	** 298 166	** 218 134	427 164 106	246 122 83	159 89 62	101 61 44	58 37 27
10 15 20 25	** ** †	** ** ** †	** ** 470	** ** 354	** ** 286	** ** 462 237	** ** 331 198	at the Er ** 257 167	** 450 206 141	** 298 166 118	218 134 98	427 164	246 122 83 63	159 89 62 48	101 61 44 34	58 37 27 21
10 15 20	**	** **	** **	** **	** ** **	** ** 462	** ** 331	** ** 257	** 450 206	** 298 166	** 218 134	427 164 106 79	246 122 83	159 89 62	101 61 44	58 37 27
Depth 10 15 20 25 30 35 40	**  **  †  372  245  188	**  **  † 308 216 169	**  **  470  261  191  152	** ** 354 224 169 136	**  **  286  194  149  122	**  **  462 237 168 132 109	** ** 331 198 146 116 97	** ** 257 167 126 101 85	** 450 206 141 108 88 74	298 166 118 92 75 64	** 218 134 98 77 64 55	427 164 106 79 63 53 45	246 122 83 63 51 43 37	159 89 62 48 39 33 29	101 61 44 34 28 24 21	58 37 27 21 18 15
Depth  10 15 20 25 30 35 40 45	**  **  †  372  245  188  154	**  **  † 308 216 169 140	**  **  470  261  191  152  127	** ** 354 224 169 136 115	**  **  286  194  149  122  104	#* 462 237 168 132 109 93	331 198 146 116 97 83	**  **  257  167  126  101  85  73	** 450 206 141 108 88 74 64	298 166 118 92 75 64 56	218 134 98 77 64 55 48	427 164 106 79 63 53 45 40	246 122 83 63 51 43 37 32	159 89 62 48 39 33 29 25	101 61 44 34 28 24 21 18	58 37 27 21 18 15 13
Depth  10 15 20 25 30 35 40 45 50	**  **  †  372  245  188  154  131	**  **  † 308 216 169 140 120	**  470 261 191 152 127 109	**  **  354  224  169  136  115  99	**  **  286  194  149  122  104  90	petitive  **  462 237 168 132 109 93 81	331 198 146 116 97 83 73	** 257 167 126 101 85 73 65	450 206 141 108 88 74 64 57	298 166 118 92 75 64 56 49	218 134 98 77 64 55 48 42	427 164 106 79 63 53 45 40 35	246 122 83 63 51 43 37 32 29	159 89 62 48 39 33 29 25 23	101 61 44 34 28 24 21 18	58 37 27 21 18 15 13 12
Depth  10  15  20  25  30  35  40  45  50  55	**  **  **  **  **  1  372  245  188  154  131  114	**  **  **  **  **  **  **  1  308  216  169  140  120  105	**  **  470  261  191  152  127  109  96	**  **  354  224  169  136  115  99  88	** ** ** 286 194 149 122 104 90 80	**  **  462  237  168  132  109  93  81  72	** ** ** 331 198 146 116 97 83 73 65	** ** 257 167 126 101 85 73 65 58	** 450 206 141 108 88 74 64 57	298 166 118 92 75 64 56 49	** 218 134 98 77 64 55 48 42 38	427 164 106 79 63 53 45 40 35 32	246 122 83 63 51 43 37 32 29 26	159 89 62 48 39 33 29 25 23 20	101 61 44 34 28 24 21 18 17	58 37 27 21 18 15 13 12 11
Depth  10 15 20 25 30 35 40 45 50	**  **  †  372  245  188  154  131	**  **  † 308 216 169 140 120	**  470 261 191 152 127 109	**  **  354  224  169  136  115  99	**  **  286  194  149  122  104  90	petitive  **  462 237 168 132 109 93 81	331 198 146 116 97 83 73	** 257 167 126 101 85 73 65	450 206 141 108 88 74 64 57	298 166 118 92 75 64 56 49	218 134 98 77 64 55 48 42	427 164 106 79 63 53 45 40 35	246 122 83 63 51 43 37 32 29	159 89 62 48 39 33 29 25 23	101 61 44 34 28 24 21 18	58 37 27 21 18 15 13 12
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80	** ** ** † 372 245 188 154 131 114 101 83 70	**  **  † 308 216 169 140 120 105 93 77 65	**  **  470  261  191  152  127  109  96  86  71  60	** ** 354 224 169 136 115 99 88 79 65 55	** ** ** 286 194 149 122 104 90 80 72 59 51	**  **  462  237  168  132  109  93  81  72  65  54  46	** ** 331 198 146 116 97 83 73 65 58 49 42	** ** ** 257 167 126 101 85 73 65 58 52 44 38	** 450 206 141 108 88 74 64 57 51 46 39 33	298 166 118 92 75 64 56 49 44 40 34 29	** 218 134 98 77 64 55 48 42 38 35 29 25	427 164 106 79 63 53 45 40 35 32 29 25 22	246 122 83 63 51 43 37 32 29 26 24 20 18	159 89 62 48 39 33 29 25 23 20 19 16	101 61 44 34 28 24 21 18 17 15 14 12	58 37 27 21 18 15 13 12 11 10 9 8 7
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90	**	**  **  † 308 216 169 140 120 105 93 77 65 57	**  **  470  261  191  152  127  109  96  86  71  60  52	** ** 354 224 169 136 115 99 88 79 65 55 48	**  **  286  194  149  122  104  90  80  72  59  51  44	**  **  462 237 168 132 109 93 81 72 65 54 46 41	** ** ** 331 198 146 116 97 83 73 65 58 49 42 37	** ** ** 257 167 126 101 85 73 65 58 52 44 38 33	** 450 206 141 108 88 74 64 57 51 46 39 33 29	** 298 166 118 92 75 64 56 49 44 40 34 29 26	** 218 134 98 77 64 55 48 42 38 35 29 25 22	427 164 106 79 63 53 45 40 35 32 29 25 22 19	246 122 83 63 51 43 37 32 29 26 24 20 18 16	159 89 62 48 39 33 29 25 23 20 19 16 14	101 61 44 34 28 24 21 18 17 15 14 12 10 9	58 37 27 21 18 15 13 12 11 10 9 8 7
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100	**	**  **  **  **  **  1  308  216  169  140  120  105  93  77  65  57  50	**  **  470  261  191  152  127  109  96  86  71  60  52  47	** ** 354 224 169 136 115 99 88 79 65 55 48 43	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40	## ## 462 237 168 132 109 93 81 72 65 54 46 41 36	** ** ** 331 198 146 116 97 83 73 65 58 49 42 37 33	** ** ** 257 167 126 101 85 73 65 58 52 44 38 33 30	** 450 206 141 108 88 74 64 57 51 46 39 33 29 26	** 298 166 118 92 75 64 56 49 44 40 34 29 26 23	** 218 134 98 77 64 55 48 42 38 35 29 25 22 20	427 164 106 79 63 53 45 40 35 32 29 25 22 19	246 122 83 63 51 43 37 32 29 26 24 20 18 16	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11	101 61 44 34 28 24 21 18 17 15 14 12 10 9 8	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110	** ** ** † 372 245 188 154 131 114 101 83 70 61	**  **  † 308 216 169 140 120 105 93 77 65 57 50 45	**  **  470  261  191  152  127  109  96  86  71  60  52  47  42	** ** 354 224 169 136 115 99 88 79 65 55 48 43 39	**  **  286  194  149  122  104  90  80  72  59  51  44  40  36	**  **  462 237 168 132 109 93 81 72 65 54 46 41	** ** ** 331 198 146 116 97 83 73 65 58 49 42 37 33 30	** ** ** 257 167 126 101 85 73 65 58 52 44 38 33 30 27	** 450 206 141 108 88 74 64 57 51 46 39 33 29	** 298 166 118 92 75 64 56 49 44 40 34 29 26	** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18	427 164 106 79 63 53 45 40 35 32 29 25 22 19	246 122 83 63 51 43 37 32 29 26 24 20 18 16	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10	101 61 44 34 28 24 21 18 17 15 14 12 10 9	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48	**  **  **  **  **  1  308  216  169  140  120  105  93  77  65  57  50	**  **  470  261  191  152  127  109  96  86  71  60  52  47	** ** 354 224 169 136 115 99 88 79 65 55 48 43	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40	yetitive  **  462 237 168 132 109 93 81 72 65 54 46 41 36 33	** ** ** 331 198 146 116 97 83 73 65 58 49 42 37 33	** ** ** 257 167 126 101 85 73 65 58 52 44 38 33 30	** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21	** 218 134 98 77 64 55 48 42 38 35 29 25 22 20	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11	101 61 44 34 28 24 21 18 17 15 14 12 10 9 8 8	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37	**  **  † 308 216 169 140 120 105 93 77 65 57 50 45 41 37 34	**  **  470  261  191  152  127  109  96  86  71  60  52  47  42  38  35  32	** ** 354 224 169 136 115 99 88 79 65 55 48 43 39 35 32 30	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27	petitive  **  462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23	** ** ** ** ** ** ** ** ** ** ** ** **	** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16	** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 9	101 61 44 34 28 24 21 18 17 15 14 12 10 9 8 8 7 6 6	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37 34	**  **  † 308 216 169 140 120 105 93 77 65 57 50 45 41 37 34 32	**  **  470  261  191  152  127  109  96  86  71  60  52  47  42  38  35  32  30	** ** ** 354 224 169 136 115 99 88 79 65 55 48 43 39 35 32 30 28	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27 26	repetitive ***  ***  462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25 23	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23 21	** ** ** ** ** ** ** ** ** ** ** ** **	*** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19 17	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16 15	*** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12 11	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11 10 9	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 8 8	101 61 44 28 24 21 18 17 15 14 12 10 9 8 8 7 6 6 6	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150 160	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37 34 32	**      **      **	**  **  470  261  191  152  127  109  66  86  71  60  52  47  42  38  35  32  30  28	**     **     **     **     354     224     169     136     115     99     88     79     65     55     48     43     39     35     32     30     28     26	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27 26 24	petitive  **  462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25 23 22	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23 21 20	** ** ** ** ** ** ** ** ** ** ** ** **	*** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19 17 16	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16 15	*** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14 13 13	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12 11	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11 10 9	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 8 8 7	101 61 44 28 24 21 18 17 15 14 12 10 9 8 8 7 6 6 6 6 5	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4 4
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150 160 170	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37 34 32 30	**	**  **  470  261  191  152  127  109  96  86  71  60  52  47  42  38  35  32  30  28  26	*** *** 354 224 169 136 115 99 88 79 65 55 48 43 39 35 32 30 28 26 24	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27 26 24 22	petitive  **  462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25 23 22 21	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23 21 20 19	** ** ** 257 167 126 101 85 73 65 58 52 44 38 33 30 27 24 22 21 19 18 17	** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19 17 16 15	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16 15	*** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14 13 13	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12 11 11	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11 10 9 8	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 8 8 8 7	101 61 44 28 24 21 18 17 15 14 12 10 9 8 8 7 6 6 6 6 5 5	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4 4 4 3
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150 160	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37 34 32	**      **      **	**  **  470  261  191  152  127  109  66  86  71  60  52  47  42  38  35  32  30  28	**     **     **     **     354     224     169     136     115     99     88     79     65     55     48     43     39     35     32     30     28     26	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27 26 24	petitive  **  462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25 23 22	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23 21 20	** ** ** ** ** ** ** ** ** ** ** ** **	*** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19 17 16	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16 15	*** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14 13 13	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12 11	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11 10 9	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 8 8 7	101 61 44 28 24 21 18 17 15 14 12 10 9 8 8 7 6 6 6 6 5	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4 4
Depth  10 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150 160 170 180	** ** ** † 372 245 188 154 131 114 101 83 70 61 54 48 44 40 37 34 32 30 28	**	** ** 470 261 191 152 127 109 96 86 71 60 52 47 42 38 35 32 30 28 26 25	*** *** 354 224 169 136 115 99 88 79 65 55 48 43 39 35 32 30 28 26 24 23	** ** ** 286 194 149 122 104 90 80 72 59 51 44 40 36 32 30 27 26 24 22 21 20	repetitive ***  *462 237 168 132 109 93 81 72 65 54 46 41 36 33 30 27 25 23 22 21 19 18	*** *** 331 198 146 116 97 83 73 65 58 49 42 37 33 30 27 25 23 21 20 19 18 17	** ** ** ** ** ** ** ** ** ** ** ** **	*** 450 206 141 108 88 74 64 57 51 46 39 33 29 26 24 22 20 19 17 16 15 14	298 166 118 92 75 64 56 49 44 40 34 29 26 23 21 19 18 16 15 14	** 218 134 98 77 64 55 48 42 38 35 29 25 22 20 18 17 15 14 13 13 12 11	427 164 106 79 63 53 45 40 35 32 29 25 22 19 17 16 14 13 12 11 11 10	246 122 83 63 51 43 37 32 29 26 24 20 18 16 14 13 12 11 10 9 8 8	159 89 62 48 39 33 29 25 23 20 19 16 14 12 11 10 9 8 8 7 7	101 61 44 28 24 21 18 17 15 14 12 10 9 8 8 8 7 6 6 6 6 5 5 5	58 37 27 21 18 15 13 12 11 10 9 8 7 6 5 5 5 4 4 4 4 3 3

<sup>\*\*</sup> Residual Nitrogen Time cannot be determined using this table (see paragraph 9-9.1 subparagraph 8 for instructions).

<sup>†</sup> Read vertically downward to the 30 fsw repetitive dive depth. Use the corresponding residual nitrogen times to compute the equivalent single dive time. Decompress using the 30 fsw air decompression table.

## **Table 9-9.** Air Decompression Table. (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (m		de trav	(FSW) vel time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
30 FSW														
371	1:00	AIR									0	1:00	0	Z
		AIR/O <sub>2</sub>									0	1:00		
380	0:20	AIR									5	6:00	0.5	Z
		AIR/O <sub>2</sub>									1	2:00		
In-Water Air/O <sub>2</sub> I			DO <sub>2</sub> Re	comme	ended -									
420	0:20	AIR									22	23:00	0.5	Z
		AIR/O <sub>2</sub>									5	6:00		
480	0:20	AIR									42	43:00	0.5	
		AIR/O <sub>2</sub>									9	10:00		
540	0:20	AIR									71	72:00	1	
		AIR/O <sub>2</sub>									14	15:00		
Exceptional Exp			compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	ssion or				
600	0:20	AIR									92	93:00	1	
		AIR/O <sub>2</sub>									19	20:00		
660	0:20	AIR									120	121:00	1	
		AIR/O <sub>2</sub>									22	23:00		
720	0:20	AIR									158	159:00	1	
		AIR/O <sub>2</sub>									27	28:00		
35 FSW														
232	1:10	AIR									0	1:10	0	Z
		AIR/O <sub>2</sub>									0	1:10		
240	0:30	AIR									4	5:10	0.5	Z
		AIR/O <sub>2</sub>									2	3:10		
In-Water Air/O <sub>2</sub> I	Decompres	sion or Surl	DO <sub>2</sub> Re	comme	ended -									
270	0:30	AIR									28	29:10	0.5	Z
		AIR/O <sub>2</sub>									7	8:10		
300	0:30	AIR									53	54:10	0.5	Z
		AIR/O <sub>2</sub>									13	14:10		
330	0:30	AIR									71	72:10	1	Z
		AIR/O <sub>2</sub>									18	19:10		
360	0:30	AIR									88	89:10	1	
		AIR/O <sub>2</sub>									22	23:10		
Exceptional Exp	osure: In-W	/ater Air Ded	compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	ssion or	SurDO	2 Required		
420	0:30	AIR									134	135:10	1.5	
		AIR/O <sub>2</sub>									29	30:10		
480	0:30	AIR									173	174:10	1.5	
		AIR/O <sub>2</sub>									38	44:10		
540	0:30	AIR									228	229:10	2	
		AIR/O <sub>2</sub>									45	51:10		
600	0:30	AIR									277	278:10	2	
		AIR/O <sub>2</sub>									53	59:10		
660	0:30	AIR									314	315:10	2.5	
		AIR/O <sub>2</sub>									63	69:10		
720	0:30	AIR									342	343:10	3	
		AIR/O <sub>2</sub>									71	82:10		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (m		ide trav	(FSW) vel time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
40 FSW														
163	1:20	AIR									0	1:20	0	0
		AIR/O <sub>2</sub>									0	1:20		
170	0:40	AIR									6	7:20	0.5	0
400	0.40	AIR/O <sub>2</sub>									2	3:20	0.5	7
180	0:40	AIR									14 <b>5</b>	15:20 6:20	0.5	Z
In-Water Air/O <sub>2</sub> I	Decompres	AIR/O <sub>2</sub>	Ωο Re	comme	nded -						<b></b>	0.20		
190	0:40	AIR	302110	001111110	naoa						21	22:20	0.5	Z
		AIR/O <sub>2</sub>									7	8:20		
200	0:40	AIR									27	28:20	0.5	Z
		AIR/O <sub>2</sub>									9	10:20		
210	0:40	AIR									39	40:20	0.5	Z
		AIR/O <sub>2</sub>									11	12:20		
220	0:40	AIR									52	53:20	0.5	Z
		AIR/O <sub>2</sub>									12	13:20		
230	0:40	AIR									64	65:20	1	Z
0.40	0.40	AIR/O <sub>2</sub>									16	17:20	4	7
240	0:40	AIR									75 <b>19</b>	76:20 20:20	1	Z
Exceptional Exp	osure: In-W	AIR/O <sub>2</sub>	compres	ssion		In-W	ater Air	O <sub>o</sub> Dec	compres	ssion o				
270	0:40	AIR						0220			101	102:20	1	Z
		AIR/O <sub>2</sub>									26	27:20		
300	0:40	AIR									128	129:20	1.5	
		AIR/O <sub>2</sub>									33	34:20		
330	0:40	AIR									160	161:20	1.5	
		AIR/O <sub>2</sub>									38	44:20		
360	0:40	AIR									184	185:20	2	
		AIR/O <sub>2</sub>									44	50:20		
420	0:40	AIR									248	249:20	2.5	
400	0.40	AIR/O <sub>2</sub>									<b>56</b> 321	62:20 322:20	2.5	
480	0:40	AIR AIR/O <sub>2</sub>									68	79:20	2.5	
Exceptional Exp	osure: In-W		Decomo	ression	1	Sı	ırDO <sub>2</sub> F	Require	d			7 3.20		
540	0:40	AIR					2		-		372	373:20	3	
	0.70	7 111 1												
	0.40	AIR/O <sub>2</sub>									80	91:20		
600	0:40										<b>80</b> 410	91:20 411:20	3.5	
600		AIR/O <sub>2</sub>											3.5	
600		AIR/O <sub>2</sub>									410	411:20	3.5	
660	0:40	$\begin{array}{c} \text{AIR/O}_2\\ \text{AIR}\\ \text{AIR/O}_2\\ \text{AIR}\\ \text{AIR/O}_2 \end{array}$									410 <b>93</b>	411:20 104:20		
660 Exceptional Exp	0:40 0:40 osure: Sur[	AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> OO <sub>2</sub>									410 93 439 103	411:20 104:20 440:20 119:20	4	
660	0:40	$\begin{array}{c} \text{AIR/O}_2\\ \text{AIR}\\ \text{AIR/O}_2\\ \text{AIR}\\ \text{AIR/O}_2 \end{array}$									410 <b>93</b> 439	411:20 104:20 440:20		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Min   Min	Bottom Time	Time to First Stop				Stop tir		in) inclu	de trav	(FSW) rel time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
125		(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)		Group
AIRIO2	45 FSW														
130	125	1:30												0	N
AIR/O2			_												_
140	130	0:50												0.5	O
Name	4.40	0.50													•
In-Water Air/O <sub>2</sub> Decompression or SurDO <sub>2</sub> Recommended	140	0:50												0.5	O
150	In Water Air/O			O Bo	oomm/	ndod						5	6:30		
AIR/O2				00 <sub>2</sub> Ke	COMMINE	enaea						25	26:30	0.5	7
160	150	0.50												0.5	۷
AIR/O₂	160	0.50												0.5	7
170 0:50 AIR AIRVo₂ 14 15:30 1 Z AIRVo₂ 17 18:30 1 Z AIRVo₂ 19 20:30 1 Z AIRVo₂ 19 20:30 1 Z AIRVo₂ 19 20:30 1 Z AIRVo₂ 2 19 20:30 1 Z  Exceptional Exposure: in-Water Air Decompression ————————————————————————————————————	100	0.50												0.5	2
AIR/O2	170	0.20	_											1	7
180       0:50       AIR       59       60:30       1       Z         190       0:50       AIR       75       76:30       1       Z         AIR/O₂       19       20:30       1       Z         Exceptional Exposure: In-Water Air Decompression       In-Water Air/O₂ Decompression or SurDO₂ Required          200       0:50       AIR       89       90:30       1       Z         AIR/O₂       23       24:30         Z       2       2       24:30          Z       2       2       24:30           Z       2       2       24:30		0.00													_
AIR/O2	180	0:50												1	Z
190															_
AIR/O2	190	0:50	=											1	Z
Exceptional Exposure: In-Water Air Decompression - In-Water Air/O <sub>2</sub> Decompression or Sur/O <sub>2</sub> Required															
200	Exceptional Expe	osure: In-V		compres	ssion -		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	sion o				
210       0:50       AIR       101       102:30       1       Z         AIR/O2       27       28:30       2       2       2       2       28:30       1       Z         220       0:50       AIR       112       113:30       1.5       Z         230       0:50       AIR       121       12:30       1.5       Z         AIR/O2       33       34:30       1.5       Z         240       0:50       AIR       130       131:30       1.5       Z         AIR/O2       37       43:30       1.5       Z         270       0:50       AIR       173       174:30       2         41R/O2       45       51:30       2       4       4       4       2       4       5       51:30       2       4															Z
AIR/O <sub>2</sub>   27   28:30   20   20   20   20   20   20   20			AIR/O <sub>2</sub>									23	24:30		
220	210	0:50	AIR									101	102:30	1	Z
AIR/O2   30   31:30			AIR/O <sub>2</sub>									27	28:30		
230	220	0:50	AIR									112	113:30	1.5	Z
AIR/O2       33 34:30         240       0:50			AIR/O <sub>2</sub>									30	31:30		
240	230	0:50	AIR									121	122:30	1.5	Z
AIR/O2       37       43:30         270       0:50       AIR       173       174:30       2         AIR/O2       45       51:30       2         300       0:50       AIR       206       207:30       2         AIR/O2       51       57:30       57:30       2         AIR/O2       61       67:30       2.5         AIR/O2       61       67:30       3         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required       88       289:30       3         420       0:50       AIR       373       374:30       3.5         AIR/O2       84       95:30       4         480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30       Exceptional Exposure: SurDO2       ————————————————————————————————————			AIR/O <sub>2</sub>									33	34:30		
270       0:50       AIR       173       174;30       2         AIR/O2       45       51:30       2         300       0:50       AIR       206       207:30       2         AIR/O2       51       57:30       2         AIR/O2       61       67:30       2.5         AIR/O2       61       67:30       3         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required       80       80:30         420       0:50       AIR       373       374:30       3.5         AIR/O2       84       95:30       4         480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30       117:30       Exceptional Exposure: SurDO2       473       474:30       4.5	240	0:50	AIR									130	131:30	1.5	Z
AIR/O2												37	43:30		
300       0:50       AIR       206       207:30       2         AIR/O2       51       57:30       2         330       0:50       AIR       243       244:30       2.5         AIR/O2       61       67:30       3         AIR/O2       69       80:30       3         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required       373       374:30       3.5         AIR/O2       84       95:30       4         480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30       117:30         Exceptional Exposure: SurDO2       473       474:30       4.5	270	0:50										173	174:30	2	
AIR/O2   51   57:30			AIR/O <sub>2</sub>												
330 0:50 AIR AIR/O <sub>2</sub> 61 67:30  360 0:50 AIR 288 289:30 3 AIR/O <sub>2</sub> 69 80:30  Exceptional Exposure: In-Water Air/O <sub>2</sub> Decompression — SurDO <sub>2</sub> Required————————————————————————————————————	300	0:50										206		2	
AIR/O <sub>2</sub> 61 67:30  360 0:50 AIR  AIR/O <sub>2</sub> 69 80:30  Exceptional Exposure: In-Water Air/O <sub>2</sub> Decompression — SurDO <sub>2</sub> Required — — — — — — — — — — — — — — — — — — —			_												
360       0:50       AIR       288       289:30       3         AIR/O2       69       80:30         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required         420       0:50       AIR       373       374:30       3.5         AIR/O2       84       95:30       95:30       4         480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30       117:30       117:30         Exceptional Exposure: SurDO2         540       0:50       AIR       473       474:30       4.5	330	0:50												2.5	
AIR/O2       69       80:30         Exceptional Exposure: In-Water Air/O2 Decompression — SurDO2 Required — — — — — — — — — — — — — — — — — — —															
Exceptional Exposure: In-Water Air/02 Decompression       SurDO2 Required         420       0:50       AIR       373       374:30       3.5         AIR/O2       84       95:30         480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30         Exceptional Exposure: SurDO2	360	0:50												3	
420       0:50       AIR       373       374:30       3.5         AIR/O2       84       95:30       95:30       95:30       96:30	Free after al Free								)			69	80:30		
AIR/O <sub>2</sub> 84 95:30 480 0:50 AIR 431 432:30 4 AIR/O <sub>2</sub> 101 117:30  Exceptional Exposure: SurDO <sub>2</sub>				Jecomp	n essio		St	IIDU <sub>2</sub> F	kequire	u		272	274.20	2 5	
480       0:50       AIR       431       432:30       4         AIR/O2       101       117:30         Exceptional Exposure: SurDO2         540       0:50       AIR       473       474:30       4.5	420	0.50												3.0	
AIR/O <sub>2</sub> 101 117:30  Exceptional Exposure: SurDO <sub>2</sub>	480	0.50												Д	
Exceptional Exposure: SurDO2	700	0.50												7	
540 0:50 AIR 473 474:30 4.5	Exceptional Expe	osure: Surl										.01	117.50		
				-								473	474:30	4.5	
	0														

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (m		de trav	(FSW) rel time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
<b>50 FSW</b>														
92	1:40	AIR									0	1:40	0	M
		AIR/O <sub>2</sub>									0	1:40		
95	1:00	AIR									2	3:40	0.5	M
		AIR/O <sub>2</sub>									1	2:40		
100	1:00	AIR									4	5:40	0.5	N
		AIR/O <sub>2</sub>									2	3:40		
110	1:00	AIR									8	9:40	0.5	Ο
		AIR/O <sub>2</sub>									4	5:40		
In-Water Air/O <sub>2</sub> [			00 <sub>2</sub> Re	comme	ended -									
120	1:00	AIR									21	22:40	0.5	0
400	4.00	AIR/O <sub>2</sub>									7	8:40		_
130	1:00	AIR									34	35:40	0.5	Z
440	4.00	AIR/O <sub>2</sub>									12	13:40	4	7
140	1:00	AIR									45 <b>16</b>	46:40 17:40	1	Z
150	1:00	AIR/O <sub>2</sub> AIR									56	57:40	1	Z
150	1.00	AIR/O <sub>2</sub>									19	20:40	ı	۷
160	1:00	AIR/O <sub>2</sub>									78	79:40	1	Z
100	1.00	AIR/O <sub>2</sub>									23	24:40	'	۷
Exceptional Exp	nsure: In-M		compres	sion -		In-\//:	ater Air/	O <sub>o</sub> Dec	compres	ssion or				
170	1:00	AIR	oompree	001011		111 444	2(017(117	02 000	ompree	301011 01	96	97:40	1	Z
		AIR/O <sub>2</sub>									26	27:40		_
180	1:00	AIR									111	112:40	1.5	Z
		AIR/O <sub>2</sub>									30	31:40		
190	1:00	AIR									125	126:40	1.5	Z
		AIR/O <sub>2</sub>									35	36:40		
200	1:00	AIR									136	137:40	1.5	Z
		AIR/O <sub>2</sub>									39	45:40		
210	1:00	AIR									147	148:40	2	
		AIR/O <sub>2</sub>									43	49:40		
220	1:00	AIR									166	167:40	2	
		AIR/O <sub>2</sub>									47	53:40		
230	1:00	AIR									183	184:40	2	
		AIR/O <sub>2</sub>									50	56:40		
240	1:00	AIR									198	199:40	2	
		AIR/O <sub>2</sub>									53	59:40		
270	1:00	AIR									236	237:40	2.5	
000	4.00	AIR/O <sub>2</sub>									62	68:40	•	
300	1:00	AIR									285	286:40	3	
Evention - LE:	noure: l= 14	AIR/O <sub>2</sub>	Doss	nre=-!	. n		urDO 1	200::-			74	85:40		
Exceptional Expo	1:00	AIR	Decom	JIESSIC	יייייי ווע	S	uIDO <sub>2</sub> l	require	:u		345	346:40	2 5	
JJU	1.00	AIR AIR/O <sub>2</sub>									345 <b>83</b>	346:40 94:40	3.5	
360	1:00	AIR/O <sub>2</sub>									393	394:40	3.5	
500	1.00	AIR/O <sub>2</sub>									92	103:40	0.0	
Exceptional Exp	osure: Surf											100.40		
420	1:00	AIR									464	465:40	4.5	
		AIR/O <sub>2</sub>									113	129:40		
		- 2									-			

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (mi		de trav	(FSW) el time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
<b>55 FSW</b>														
74	1:50	AIR									0	1:50	0	L
		AIR/O <sub>2</sub>									0	1:50	^ =	
75	1:10	AIR									1	2:50	0.5	L
80	1:10	AIR/O <sub>2</sub> AIR									1 4	2:50 5:50	0.5	М
00	1.10	AIR/O <sub>2</sub>									2	3:50	0.5	IVI
90	1:10	AIR									10	11:50	0.5	N
		AIR/O <sub>2</sub>									5	6:50		
In-Water Air/O <sub>2</sub> [	Decompres	sion or Surl	00 <sub>2</sub> Re	comme	ended -									
100	1:10	AIR									17	18:50	0.5	0
440		AIR/O <sub>2</sub>									8	9:50	^ =	
110	1:10	AIR									34	35:50	0.5	0
120	1:10	AIR/O <sub>2</sub> AIR									<b>12</b> 48	13:50 49:50	1	Z
120	1.10	AIR/O <sub>2</sub>									40 <b>17</b>	18:50	'	۷
130	1:10	AIR									59	60:50	1	Z
		AIR/O <sub>2</sub>									22	23:50		
140	1:10	AIR									84	85:50	1	Z
		AIR/O <sub>2</sub>									26	27:50		
Exceptional Exp	osure: In-W	/ater Air Ded	compre	ssion -		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	sion o	r SurDC			
150	1:10	AIR									105	106:50	1.5	Z
400	4.40	AIR/O <sub>2</sub>									30	31:50		_
160	1:10	AIR									123 <b>34</b>	124:50 35:50	1.5	Z
170	1:10	AIR/O <sub>2</sub> AIR									138	139:50	1.5	Z
170	1.10	AIR/O <sub>2</sub>									40	46:50	1.5	_
180	1:10	AIR									151	152:50	2	Z
		AIR/O <sub>2</sub>									45	51:50		
190	1:10	AIR									169	170:50	2	
		AIR/O <sub>2</sub>									50	56:50		
200	1:10	AIR									190	191:50	2	
040	4.40	AIR/O <sub>2</sub>									54	60:50	0.5	
210	1:10	AIR									208	209:50	2.5	
220	1:10	AIR/O <sub>2</sub> AIR									<b>58</b> 224	64:50 225:50	2.5	
220	1.10	AIR/O <sub>2</sub>									62	68:50	2.0	
230	1:10	AIR									239	240:50	2.5	
		AIR/O <sub>2</sub>									66	77:50		
240	1:10	AIR									254	255:50	3	
		AIR/O <sub>2</sub>									69	80:50		
Exceptional Exp			Decomp	ressio	n	Su	rDO <sub>2</sub> F	Require	d					
270	1:10	AIR									313	314:50	3.5	
000	4.40	AIR/O <sub>2</sub>									83	94:50	2.5	
300	1:10	AIR									380 <b>94</b>	381:50	3.5	
330	1:10	AIR/O <sub>2</sub> AIR									432	105:50 433:50	4	
550	1.10	AIR/O <sub>2</sub>									106	122:50	<b>-T</b>	
Exceptional Exp	osure: Sur[													
360	1:10	AIR									474	475:50	4.5	
		AIR/O <sub>2</sub>									118	134:50		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tii	mes (m	SSION ( in) inclu air and	ide trav	el time,			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
60 FSW														
63	2:00	AIR									0	2:00	0	K
		AIR/O <sub>2</sub>									0	2:00		
65	1:20	AIR									2	4:00	0.5	L
		AIR/O <sub>2</sub>									1	3:00		
70	1:20	AIR									7	9:00	0.5	L
		AIR/O <sub>2</sub>									4	6:00		
80	1:20	AIR									14	16:00	0.5	N
In Motor Air/O	Danamana	AIR/O <sub>2</sub>									7	9:00		
In-Water Air/O <sub>2</sub> I	1:20	AIR	JO <sub>2</sub> Rei	COMM	enaea						23	25:00	0.5	0
90	1.20	AIR/O <sub>2</sub>									10	12:00	0.5	O
100	1:20	AIR									42	44:00	1	Z
100	1.20	AIR/O <sub>2</sub>									15	17:00		_
110	1:20	AIR									57	59:00	1	Z
		AIR/O <sub>2</sub>									21	23:00		
120	1:20	AIR									75	77:00	1	Z
		AIR/O <sub>2</sub>									26	28:00		
Exceptional Exp	osure: In-W	Vater Air De	compres	sion -		In-W	ater Air/	O <sub>2</sub> Dec	ompres	sion o	r SurDO	2 Required		
130	1:20	AIR									102	104:00	1.5	Z
		AIR/O <sub>2</sub>									31	33:00		
140	1:20	AIR									124	126:00	1.5	Z
		AIR/O <sub>2</sub>									35	37:00		
150	1:20	AIR									143	145:00	2	Z
		AIR/O <sub>2</sub>									41	48:00		
160	1:20	AIR									158	160:00	2	Z
170	4.00	AIR/O <sub>2</sub>									48	55:00	0	
170	1:20	AIR									178	180:00	2	
180	1:20	AIR/O <sub>2</sub> AIR									<b>53</b> 201	60:00 203:00	2.5	
160	1.20	AIR/O <sub>2</sub>									<b>59</b>	66:00	2.5	
190	1:20	AIR									222	224:00	2.5	
100	1.20	AIR/O <sub>2</sub>									64	71:00	2.0	
200	1:20	AIR									240	242:00	2.5	
		AIR/O <sub>2</sub>									68	80:00		
210	1:20	AIR									256	258:00	3	
		AIR/O <sub>2</sub>									73	85:00		
220	1:20	AIR									278	280:00	3	
		AIR/O <sub>2</sub>									77	89:00		
Exceptional Exp			Decomp	ressio	n	Sı	urDO <sub>2</sub> F	Require	d					
230	1:20	AIR									300	302:00	3.5	
		AIR/O <sub>2</sub>									82	94:00		
240	1:20	AIR									321	323:00	3.5	
070	4.00	AIR/O <sub>2</sub>									88	100:00	4	
270	1:20	AIR									398	400:00	4	
Exceptional Exp	OSUITA: Surf	AIR/O <sub>2</sub>									102	119:00		
300	1:20	AIR									456	458:00	4.5	
300	1.20	AIR/O <sub>2</sub>									115	132:00	7.0	
		, 0.2										.02.00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

(min   Mis)   Gas Mix   100   90   80   70   60   50   40   30   20   (Mis)   Periods   Group	Bottom Time	Time to First Stop				Stop tir	mes (m	SSION ( in) inclu air and	de trav	el time,			Total Ascent Time	Chamber O <sub>2</sub>	Repet
ABB   2-20	(min)	-	Gas Mix	100	90	80	70	60	50	40	30	20			-
So		2:20	AIR									0	2:20	0	K
AIR/O2			AIR/O <sub>2</sub>									0			
140	50	1:40	AIR									2	4:20	0.5	K
AIR/O2			AIR/O <sub>2</sub>									1	3:20		
140	55	1:40	AIR									9	11:20	0.5	L
In-Water Air/O₂ Decompression or Sur/O₂ Recommended			AIR/O <sub>2</sub>									5	7:20		
In-Water Air/O <sub>2</sub> Decompression or SurDO <sub>2</sub> Recommended	60	1:40	AIR									14	16:20	0.5	M
To												8	10:20		
AIR/O2	In-Water Air/O <sub>2</sub> [	Decompres	sion or Surl	DO <sub>2</sub> Re	comme	ended									
80	70	1:40	AIR									24	26:20	0.5	N
AIR/O2			_									13	15:20		
90	80	1:40										44	46:20	1	Ο
AIR/O2   In-Water Air/O2   Decompression or SurDO2   Required   Receptional Exposure: In-Water Air/O2   Decompression   Decompression			AIR/O <sub>2</sub>									17	19:20		
Exceptional Exposure: In-Water Air Decompression	90	1:40												1	Z
100															
Mario	Exceptional Exp	osure: In-W		compre	ssion -		In-W	ater Air/	O <sub>2</sub> Dec	ompres	sion o	r SurDC			
AIR/O2	100	1:40												1.5	Z
120 1:40 AIR	110	1:40	AIR									120	122:20	1.5	Z
AIR/O2			AIR/O <sub>2</sub>									38	45:20		
130       1:40       AIR       167       169:20       2       Z         AIR/O₂       51       58:20       58:20       140       1:40       AIR       189       191:20       2.5       2.5         AIR/O₂       59       66:20       66:20       2.5       2.5       66:20       2.5 <th< td=""><td>120</td><td>1:40</td><td>AIR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>145</td><td>147:20</td><td>2</td><td>Z</td></th<>	120	1:40	AIR									145	147:20	2	Z
AIR/O2			AIR/O <sub>2</sub>									44	51:20		
140       1:40       AIR       189       191:20       2.5         AIR/O₂       59       66:20       66:20         150       1:40       AIR       219       221:20       2.5         AIR/O₂       66       78:20       78:	130	1:40	AIR									167	169:20	2	Z
AIR/O2			AIR/O <sub>2</sub>									51	58:20		
150 1:40 AIR 219 221:20 2.5  AIR/O₂ 66 78:20  160 1:20 AIR 1 244 247:00 3  AIR/O₂ 1 72 85:00  Exceptional Exposure: In-Water Air/O₂ Decompression — SurDO₂ Required  170 1:20 AIR 2 265 269:00 3  AIR/O₂ 1 78 91:00  180 1:20 AIR 4 289 295:00 3.5  AIR/O₂ 2 83 97:00  190 1:20 AIR 5 316 323:00 3.5  AIR/O₂ 2 3 88 103:00  200 1:20 AIR 9 345 356:00 4  AIR/O₂ 5 93 115:00  210 1:20 AIR 9 345 356:00 4  AIR/O₂ 5 93 115:00  Exceptional Exposure: SurDO₂ ————————————————————————————————————	140	1:40	AIR									189	191:20	2.5	
AIR/O2       66       78:20         160       1:20       AIR       1       244       247:00       3         AIR/O2       1       72       85:00       85:00       1         Exceptional Exposure: In-Water Air/O2 Decompression — SurDO2 Required       ———————————————————————————————————			AIR/O <sub>2</sub>									59	66:20		
160       1:20       AIR       1       244       247:00       3         AIR/O2       1 72       85:00         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required         170       1:20       AIR       2       265       269:00       3         AIR/O2       1       78       91:00         180       1:20       AIR       4       289       295:00       3.5         AIR/O2       2       83       97:00       3.5         190       1:20       AIR       5       316       323:00       3.5         AIR/O2       3       88       103:00       3.5         200       1:20       AIR       9       345       356:00       4         AIR/O2       5       93       115:00       4       4       4       4       25       454       481:00       5       4       4       25       454       481:00       5       5       4       4       25       454       481:00       5       5       5       4       4       240       11:20       AIR       25       454       481:00       5 <td< td=""><td>150</td><td>1:40</td><td>AIR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>219</td><td>221:20</td><td>2.5</td><td></td></td<>	150	1:40	AIR									219	221:20	2.5	
AIR/O2       1 72 85:00         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required         170       1:20       AIR       2 265 269:00       3         AIR/O2       1 78 91:00       3.5         180       1:20       AIR       4 289 295:00       3.5         AIR/O2       2 83 97:00       3.5       3.6       323:00       3.5         AIR/O2       3 88 103:00       3.5       3.5       3.5       3.5       3.6       3.5       3.6       3.5       3.6       3.5       3.6       3.5       3.5       3.6       3.5       3.6       3.5       3.5       3.6       3.5       3.5       3.6       3.5       3.5       3.5       3.6       3.5       3.5       3.6       3.5       3.5       3.6       3.5       3.5       3.6       3.2       3.6       3.5       3.6       3.5       3.6       3.2       3.6       3.5       3.6       3			AIR/O <sub>2</sub>									66	78:20		
Exceptional Exposure: In-Water Air/O2 Decompression — SurDO2 Required         170       1:20       AIR       2 265 269:00 3         AIR/O2       1 78 91:00         180       1:20       AIR       4 289 295:00 3.5         AIR/O2       2 83 97:00         190       1:20       AIR       5 316 323:00 3.5         AIR/O2       3 88 103:00       3.5         200       1:20       AIR       9 345 356:00 4         AIR/O2       5 93 115:00       4         210       1:20       AIR       13 378 393:00 4         AIR/O2       7 98 122:00       5         Exceptional Exposure: SurDO2       7 98 122:00         240       1:20       AIR       25 454 481:00 5	160	1:20	AIR								1	244	247:00	3	
170       1:20       AIR       2 265       269:00       3         AIR/O2       1 78       91:00         180       1:20       AIR       4 289       295:00       3.5         AIR/O2       2 83       97:00 <t< td=""><td></td><td></td><td>AIR/O<sub>2</sub></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>72</td><td>85:00</td><td></td><td></td></t<>			AIR/O <sub>2</sub>								1	72	85:00		
170       1:20       AIR       2 265       269:00       3         AIR/O2       1 78       91:00         180       1:20       AIR       4 289       295:00       3.5         AIR/O2       2 83       97:00 <t< td=""><td>Exceptional Expe</td><td>osure: In-W</td><td>/ater Air/0<sub>2</sub> I</td><td>Decom</td><td>oressio</td><td>n</td><td> Sı</td><td>ırDO<sub>2</sub> F</td><td>Require</td><td> d</td><td></td><td></td><td></td><td></td><td></td></t<>	Exceptional Expe	osure: In-W	/ater Air/0 <sub>2</sub> I	Decom	oressio	n	Sı	ırDO <sub>2</sub> F	Require	 d					
180       1:20       AIR       4       289       295:00       3.5         AIR/O2       2       83       97:00         190       1:20       AIR       5       316       323:00       3.5         AIR/O2       3       88       103:00       100       100       100       100       100       4       100       100       4       100											2	265	269:00	3	
AIR/O2   2 83 97:00			AIR/O <sub>2</sub>								1	78	91:00		
190       1:20       AIR       5       316       323:00       3.5         AIR/O <sub>2</sub> 3       88       103:00         200       1:20       AIR       9       345       356:00       4         AIR/O <sub>2</sub> 5       93       115:00       15:00       4         210       1:20       AIR       13       378       393:00       4         AIR/O <sub>2</sub> 7       98       122:00       122:00       120         Exceptional Exposure: SurDO <sub>2</sub> 25       454       481:00       5	180	1:20	AIR								4	289	295:00	3.5	
AIR/O2   3 88 103:00			AIR/O <sub>2</sub>								2	83	97:00		
200       1:20       AIR       9       345       356:00       4         AIR/O2       5       93       115:00         210       1:20       AIR       13       378       393:00       4         AIR/O2       7       98       122:00         Exceptional Exposure: SurDO2         240       1:20       AIR       25       454       481:00       5	190	1:20	AIR								5	316	323:00	3.5	
AIR/O <sub>2</sub> 5 93 115:00 210 1:20 AIR 13 378 393:00 4 AIR/O <sub>2</sub> 7 98 122:00  Exceptional Exposure: SurDO <sub>2</sub>			AIR/O <sub>2</sub>								3	88	103:00		
210     1:20     AIR     13     378     393:00     4       AIR/O <sub>2</sub> 7     98     122:00       Exceptional Exposure: SurDO <sub>2</sub> 240     1:20     AIR     25     454     481:00     5	200	1:20	AIR								9	345	356:00	4	
AIR/O <sub>2</sub> 7     98     122:00       Exceptional Exposure: SurDO <sub>2</sub> ————————————————————————————————————			AIR/O <sub>2</sub>								5	93	115:00		
Exceptional Exposure: SurDO <sub>2</sub>	210	1:20	AIR								13	378	393:00	4	
240 1:20 AIR 25 454 481:00 5											7	98	122:00		
	Exceptional Expo	osure: Sur[	002												
AIR/O <sub>2</sub> 13 110 140:00	240	1:20	AIR								25	454	481:00	5	
			AIR/O <sub>2</sub>								13	110	140:00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (mi		ide trav	(FSW) rel time, stop			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
80 FSW														
39	2:40	AIR									0	2:40	0	J
		AIR/O <sub>2</sub>									0	2:40		
40	2:00	AIR									1	3:40	0.5	J
		AIR/O <sub>2</sub>									1	3:40		
45	2:00	AIR									10	12:40	0.5	K
In Mater Air/O		AIR/O <sub>2</sub>			d . d						5	7:40		
In-Water Air/O <sub>2</sub> [	2:00	AIR	JU <sub>2</sub> Re	COMM	enaea -						17	19:40	0.5	M
50	2.00	AIR/O <sub>2</sub>									9	11:40	0.5	IVI
55	2:00	AIR AIR									24	26:40	0.5	М
00	2.00	AIR/O <sub>2</sub>									13	15:40	0.0	141
60	2:00	AIR									30	32:40	1	N
00	2.00	AIR/O <sub>2</sub>									16	18:40	•	.,
70	2:00	AIR									54	56:40	1	0
		AIR/O <sub>2</sub>									22	24:40		
80	2:00	AIR									77	79:40	1.5	Z
		AIR/O <sub>2</sub>									30	32:40		
Exceptional Exp	osure: In-W		compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	ssion o	r SurDO	Required -		
90	2:00	AIR									114	116:40	1.5	Z
		AIR/O <sub>2</sub>									39	46:40		
100	1:40	AIR								1	147	150:20	2	Z
		AIR/O <sub>2</sub>								1	46	54:20		
110	1:40	AIR								6	171	179:20	2	Z
		AIR/O <sub>2</sub>								3	51	61:20		
120	1:40	AIR								10	200	212:20	2.5	
		AIR/O <sub>2</sub>								5	59	71:20		
130	1:40	AIR								14	232	248:20	3	
		AIR/O <sub>2</sub>								7	67	86:20		
Exceptional Exp			Decomp	oressio	n	Sι	ırDO <sub>2</sub> F	Require	d					
140	1:40	AIR								17	258	277:20	3.5	
450	1,10	AIR/O <sub>2</sub>								9	73	94:20	2.5	
150	1:40	AIR								19	285	306:20	3.5	
460	1.10	AIR/O <sub>2</sub>								10	80	102:20	4	
160	1:40	AIR AIR/O <sub>2</sub>								21 <b>11</b>	318 <b>86</b>	341:20 114:20	4	
170	1:40	AIR/O <sub>2</sub>								27	354	383:20	4	
170	1.40	AIR/O <sub>2</sub>								14	90	121:20	7	
Exceptional Exp	osure: Surf													
180	1:40	AIR								33	391	426:20	4.5	
		AIR/O <sub>2</sub>								17	96	130:20		
210	1:40	AIR								51	473	526:20	5	
		AIR/O <sub>2</sub>								26	110	158:20		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	MPRES mes (mi	n) inclu	de trav	el time,			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
90 FSW														
33	3:00	AIR									0	3:00	0	J
		AIR/O <sub>2</sub>									0	3:00		
35	2:20	AIR									4	7:00	0.5	J
		AIR/O <sub>2</sub>									2	5:00		
40	2:20	AIR									14	17:00	0.5	L
		AIR/O <sub>2</sub>									7	10:00		1
In-Water Air/O <sub>2</sub> [			DO <sub>2</sub> Re	comme	ended -							00.00	0.5	
45	2:20	AIR									23	26:00	0.5	M
50	2.20	AIR/O <sub>2</sub> AIR									<b>12</b> 31	15:00	1	NI
50	2:20										17	34:00 20:00	1	N
EE	2:20	AIR/O <sub>2</sub> AIR									39		1	0
55	2:20	AIR/O <sub>2</sub>									21	42:00 24:00	1	0
60	2:20	AIR AIR									56	59:00	1	0
00	2.20	AIR/O <sub>2</sub>									24	27:00	'	O
70	2:20	AIR									83	86:00	1.5	Z
70	2.20	AIR/O <sub>2</sub>									32	35:00	1.0	-
Exceptional Expo	osure: In-W		compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	sion or				
80	2:00	AIR						- 2		5	125	132:40	2	Z
		AIR/O <sub>2</sub>								3	40	50:40		
90	2:00	AIR								13	158	173:40	2	Z
		AIR/O <sub>2</sub>								7	46	60:40		
100	2:00	AIR								19	185	206:40	2.5	
		AIR/O <sub>2</sub>								10	53	70:40		
110	2:00	AIR								25	224	251:40	3	
		AIR/O <sub>2</sub>								13	61	86:40		
Exceptional Expo	osure: In-W	/ater Air/0 <sub>2</sub> [	Decomp	ressio	n	Su	rDO <sub>2</sub> F	Require	d					
120	1:40	AIR							2	28	256	288:20	3.5	
		AIR/O <sub>2</sub>							2	14	70	98:40		
130	1:40	AIR							5	28	291	326:20	3.5	
		AIR/O <sub>2</sub>							5	14	79	110:40		
140	1:40	AIR							8	28	330	368:20	4	
		AIR/O <sub>2</sub>							8	14	87	126:40		
Exceptional Expo														
150	1:40	AIR							11	34	378	425:20	4.5	
100	1.10	AIR/O <sub>2</sub>							11	17	94	139:40	4.5	
160	1:40	AIR AIR/O <sub>2</sub>							13 13	40 <b>20</b>	418 <b>101</b>	473:20	4.5	
170	1:40	AIR/O <sub>2</sub>							15	45	451	151:40 513:20	5	
170	1.40	AIR AIR/O <sub>2</sub>							15	23	106	166:40	J	
180	1:40	AIR AIR							16	51	479	548:20	5.5	
100	1.40	AIR/O <sub>2</sub>							16	26	112	176:40	0.0	
240	1:40	AIR							42	68	592	704:20	7.5	
3	•	AIR/O <sub>2</sub>							42	34	159	267:40	* * *	
										٠.				

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100	90	Stop tir	nes (m	in) inclu	STOPS ide trav first O <sub>2</sub> 50	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
25	3:20	AIR									0	3:20	0	Н
		AIR/O <sub>2</sub>									0	3:20		
30	2:40	AIR									3	6:20	0.5	J
		AIR/O <sub>2</sub>									2	5:20		
35	2:40	AIR									15	18:20	0.5	L
		AIR/O <sub>2</sub>									8	11:20		
In-Water Air/O <sub>2</sub> [			DO <sub>2</sub> Re	comme	ended -									
40	2:40	AIR									26	29:20	1	M
		AIR/O <sub>2</sub>									14	17:20		
45	2:40	AIR									36	39:20	1	N
		AIR/O <sub>2</sub>									19	22:20		
50	2:40	AIR									47	50:20	1	0
	0.10	AIR/O <sub>2</sub>									24	27:20		-
55	2:40	AIR									65	68:20	1.5	Z
0.0	0.10	AIR/O <sub>2</sub>									28	31:20		_
60	2:40	AIR									81	84:20	1.5	Z
F		AIR/O <sub>2</sub>				I 10/	-4 A:-	(O. D			33	36:20		
Exceptional Exp			compre	ssion -		IN-VV	ater Air	O <sub>2</sub> Dec	ompres					Z
70	2:20	AIR								11 <b>6</b>	124 <b>39</b>	138:00	2	۷
80	2:20	AIR/O <sub>2</sub> AIR								21	160	53:00 184:00	2.5	Z
80	2.20	AIR/O <sub>2</sub>								11	45	64:00	2.5	۷
90	2:00	AIR							2	28	196	228:40	2.5	
30	2.00	AIR/O <sub>2</sub>							2	14	53	82:00	2.0	
Exceptional Exp	osure: In-W		Decomr	ressio	n	Sı	ırDO2 F	Require				02.00		
100	2:00	AIR		. 50010	• •				9	28	241	280:40	3	
		AIR/O <sub>2</sub>							9	14	66	102:00	-	
110	2:00	AIR							14	28	278	322:40	3.5	
		AIR/O <sub>2</sub>							14	14	76	117:00		
120	2:00	AIR							19	28	324	373:40	4	
		AIR/O <sub>2</sub>							19	14	85	136:00		
Exceptional Exp	osure: Sur	002												
150	1:40	AIR						3	26	46	461	538:20	5	
		AIR/O <sub>2</sub>						3	26	23	109	183:40		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	nes (mi	n) inclu	STOPS de trave	el time,			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group
110 FSW			ı								'			-
20	3:40	AIR									0	3:40	0	Н
		AIR/O <sub>2</sub>									0	3:40		
25	3:00	AIR									5	8:40	0.5	I
		AIR/O <sub>2</sub>									3	6:40		
30	3:00	AIR									14	17:40	0.5	K
		AIR/O <sub>2</sub>									7	10:40		
In-Water Air/O <sub>2</sub> I	Decompres	sion or Surl	DO <sub>2</sub> Re	comme	ended -									
35	3:00	AIR									27	30:40	1	М
		AIR/O <sub>2</sub>									14	17:40		
40	3:00	AIR									39	42:40	1	N
		AIR/O <sub>2</sub>									20	23:40		
45	3:00	AIR									50	53:40	1	0
		AIR/O <sub>2</sub>									26	29:40		
50	3:00	AIR									71	74:40	1.5	Z
		AIR/O <sub>2</sub>									32	35:40		
Exceptional Exp			compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	ompres					
55	2:40	AIR								5	85	93:20	1.5	Z
		AIR/O <sub>2</sub>								3	33	44:20		_
60	2:40	AIR								13	111	127:20	2	Z
		AIR/O <sub>2</sub>								7	36	51:20		_
70	2:40	AIR								26	155	184:20	2.5	Z
		AIR/O <sub>2</sub>					DO 5			14	42	64:20		
Exceptional Exp			Decomp	ressio	n	Su	IrDO <sub>2</sub> R	equired		00	000	040.00		
80	2:20	AIR							9	28 <b>14</b>	200	240:00	2.5	
90	2:20	AIR/O <sub>2</sub> AIR							18	1 <b>4</b> 28	<b>54</b> 249	90:20 298:00	3.5	
90	2.20	AIR/O <sub>2</sub>							18	14	68	113:20	3.5	
100	2:20	AIR							25	28	295	351:00	3.5	
100	2.20	AIR/O <sub>2</sub>							25	14	79	131:20	0.0	
110	2:00	AIR/O <sub>2</sub>						5	26	28	353	414:40	4	
110	2.00	AIR/O <sub>2</sub>						5	26	14	91	154:00	7	
Exceptional Exp	osure: Sur													
120	2:00	AIR						10	26	35	413	486:40	4.5	
		AIR/O <sub>2</sub>						10	26	18	101	173:00		
180	1:40	AIR					3	23	47	68	593	736:20	7.5	
		AIR/O <sub>2</sub>					3	23	47	34	159	298:40		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100	90	Stop tin		n) inclu	ide trav	(FSW) rel time, stop 40	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
120 FSW														
15	4:00	AIR									0	4:00	0	F
		AIR/O <sub>2</sub>									0	4:00		
20	3:20	AIR									4	8:00	0.5	Н
		AIR/O <sub>2</sub>									2	6:00		
25	3:20	AIR									9	13:00	0.5	J
		AIR/O <sub>2</sub>									5	9:00		
In-Water Air/O <sub>2</sub> I	Decompres	sion or Surl	00 <sub>2</sub> Re	comme	ended -									
30	3:20	AIR									24	28:00	0.5	L
		AIR/O <sub>2</sub>									13	17:00		
35	3:20	AIR									38	42:00	1	N
		AIR/O <sub>2</sub>									20	24:00		
40	3:00	AIR								2	49	54:40	1	0
		AIR/O <sub>2</sub>								1	26	30:40		
45	3:00	AIR								3	71	77:40	1.5	Z
		AIR/O <sub>2</sub>								2	31	36:40		
Exceptional Exp	osure: In-W	ater Air Ded	compres	ssion -		In-Wa	ater Air/	O <sub>2</sub> Dec	compres	sion or	SurDC	2 Required		
50	3:00	AIR								10	85	98:40	1.5	Z
		AIR/O <sub>2</sub>								5	33	46:40		
55	3:00	AIR								19	116	138:40	2	Z
		AIR/O <sub>2</sub>								10	35	53:40		
60	3:00	AIR								27	142	172:40	2	Z
		AIR/O <sub>2</sub>								14	39	61:40		
70	2:40	AIR							13	28	190	234:20	2.5	
		AIR/O <sub>2</sub>							13	14	51	86:40		
Exceptional Exp	osure: In-W	ater Air/0 <sub>2</sub> I	Decomp	ressio	n	Su	rDO <sub>2</sub> F	Require	d					
80	2:40	AIR							24	28	246	301:20	3	
		AIR/O <sub>2</sub>							24	14	67	118:40		
90	2:20	AIR						7	26	28	303	367:00	3.5	
		AIR/O <sub>2</sub>						7	26	14	80	140:20		
100	2:20	AIR						15	25	28	372	443:00	4	
		AIR/O <sub>2</sub>						15	25	14	95	167:20	1	
Exceptional Exp														
110	2:20	AIR						21	25	38	433	520:00	5	
		AIR/O <sub>2</sub>						21	25	19	105	188:20		
120	2:00	AIR					3	23	25	47	480	580:40	5.5	
		AIR/O <sub>2</sub>					3	23	25	24	113	211:00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

	Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100	90	DECOI Stop tin exce 80		n) inclu	de trav	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
1															
	12	4:20	AIR									0	4:20	0	F
			AIR/O <sub>2</sub>									0	4:20		
	15	3:40	AIR									3	7:20	0.5	G
			AIR/O <sub>2</sub>									2	6:20		
	20	3:40	AIR									8	12:20	0.5	1
			AIR/O <sub>2</sub>									5	9:20		
Ir	n-Water Air/O <sub>2</sub> D	Decompres	sion or Sur[	OO <sub>2</sub> Re	comme	ended -									
	25	3:40	AIR									17	21:20	0.5	K
			AIR/O <sub>2</sub>									9	13:20		
	30	3:20	AIR								2	32	38:00	1	M
			AIR/O <sub>2</sub>								1	17	22:00		
	35	3:20	AIR								5	44	53:00	1	0
			AIR/O <sub>2</sub>								3	23	30:00		
	40	3:20	AIR								6	66	76:00	1.5	Z
			AIR/O <sub>2</sub>								3	30	37:00		
E	xceptional Expo	sure: In-W	ater Air Ded	compres	ssion -		In-Wa	ter Air/	O <sub>2</sub> Dec	ompres	sion or	SurDO	Required -		
_	45	3:00	AIR							1	11	84	99:40	1.5	Z
			AIR/O <sub>2</sub>							1	6	33	49:00		
	50	3:00	AIR							2	20	118	143:40	2	Z
			AIR/O <sub>2</sub>							2	10	36	57:00		
	55	3:00	AIR							4	28	146	181:40	2	Z
			AIR/O <sub>2</sub>							4	14	40	67:00		
	60	3:00	AIR							12	28	170	213:40	2.5	Z
			AIR/O <sub>2</sub>							12	14	46	81:00		
ΓE	Exceptional Expo	sure: In-W		Decomp	ressio	n	Su	rDO2 F	Require						
	70	2:40	AIR						1	26	28	235	293:20	3	
			AIR/O <sub>2</sub>						1	26	14	63	117:40		
	80	2:40	AIR						12	26	28	297	366:20	3.5	
			AIR/O <sub>2</sub>						12	26	14	79	144:40		
	90	2:40	AIR						22	25	28	375	453:20	4	
	00	2.10	AIR/O <sub>2</sub>						22	25	14	95	174:40	•	
F	Exceptional Expo	osure: SurF													
_	100	2:20	AIR					6	23	26	38	444	540:00	5	
		0	AIR/O <sub>2</sub>					6	23	26	20	106	204:20	J	
	120	2:20	AIR					17	24	27	57	534	662:00	6	
	123	2.20	AIR/O <sub>2</sub>					17	24	27	29	130	255:20	J	
	180	2:00	AIR				13	21	45	57	94	658	890:40	9	
	100	2.00	AIR/O <sub>2</sub>				13	21	45	57	46	198	418:00	3	
			AIR/U2				13	21	45	31	40	130	410.00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100	90	Stop tin	nes (mi	ssion s n) include air and f 60	de trav	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
10	4:40	AIR									0	4:40	0	E
		AIR/O <sub>2</sub>									0	4:40		
15	4:00	AIR									5	9:40	0.5	Н
		AIR/O <sub>2</sub>									3	7:40		
20	4:00	AIR									13	17:40	0.5	J
		AIR/O <sub>2</sub>									7	11:40		
In-Water Air/O <sub>2</sub> [	Decompres	sion or Surl	00 <sub>2</sub> Re	comme	ended -									
25	3:40	AIR								3	24	31:20	1	L
		AIR/O <sub>2</sub>								2	12	18:20		
30	3:40	AIR								7	37	48:20	1	N
		AIR/O <sub>2</sub>								4	19	27:20		
35	3:20	AIR							2	7	58	71:00	1.5	Ο
		AIR/O <sub>2</sub>							2	4	26	36:20		
Exceptional Expo	osure: In-W	ater Air Ded	compre	ssion -		In-Wa	ater Air/0	O <sub>2</sub> Dec	ompres	sion or	SurDC	2 Required		
40	3:20	AIR							4	7	82	97:00	1.5	Z
		AIR/O <sub>2</sub>							4	4	33	50:20		
45	3:20	AIR							5	18	114	141:00	2	Z
		AIR/O <sub>2</sub>							5	9	36	59:20		
50	3:20	AIR							8	27	145	184:00	2	Z
		AIR/O <sub>2</sub>							8	14	39	70:20		
55	3:00	AIR						1	15	29	171	219:40	2.5	Z
		AIR/O <sub>2</sub>						1	15	15	45	85:00		
Exceptional Expo	osure: In-W	ater Air/0 <sub>2</sub> I	Decomp	ressio	n	Su	rDO <sub>2</sub> R	equire	db					
60	3:00	AIR						2	23	28	209	265:40	3	
		AIR/O <sub>2</sub>						2	23	14	56	109:00		
70	3:00	AIR						14	25	29	276	347:40	3.5	
		AIR/O <sub>2</sub>						14	25	15	74	142:00		
80	2:40	AIR					2	24	25	29	362	445:20	4	
		AIR/O <sub>2</sub>					2	24	25	15	91	175:40		
Exceptional Expo	osure: SurE	002												
90	2:40	AIR					12	23	26	38	443	545:20	5	
		AIR/O <sub>2</sub>					12	23	26	19	107	210:40		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Miss   Sas Mix   100   90   80   70   60   50   40   30   20   (M:S)   Periods   Gr	(min) 150 FSW 8 10	to First Stop (M:S) 5:00 4:20 4:20 0ecompress 4:00	AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or Surf		90	Stop tin exce	nes (mii pt first a	n) inclu iir and	de trave first O <sub>2</sub>	el time, stop	30	0	Ascent Time (M:S)	O <sub>2</sub> Periods	Repet Group
Miss   Sas Mix   100   90   80   70   60   50   40   30   20   (M:S)   Periods   Gr	(min) 150 FSW 8 10	(M:S) 5:00 4:20 4:20 4:20 0ecompress 4:00	AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or Surf			80	70	60	50	40	30	0	( <b>M:S</b> )	Periods	Group
8   5:00   AIR   0   5:00   0   0   0   0   0   0   0   0   0	8 10 15	4:20 4:20 0ecompres: 4:00	AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or Surf	DO <sub>2</sub> Rec	comme									0	Е
8   5:00   AIR   0   5:00   0   0   0   0   0   0   0   0   0	8 10 15	4:20 4:20 0ecompres: 4:00	AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or Surf	DO <sub>2</sub> Red	comme									0	E
10 4:20 AIR AIRIVo2 15 4:20 AIR AIRIVo2  In-Water Airi/O2 Decompression or SurDO2 Recommended  20 4:00 AIR AIRIVo2  1 8 13:00 0.5 AIRIVO2  1 8 13:40 0.5 AIRIVO2  1 1 8 13:40  25 4:00 AIR AIRIVO2  1 1 8 13:40  25 4:00 AIR AIRIVO2  1 1 8 13:40  25 4:00 AIR AIRIVO2  30 3:40 AIR AIRIVO2  1 4 14 22:40  AIRIVO2  Exceptional Exposure: In-Water AiriVO2 Decompression	15	4:20 Decompress 4:00	AIR AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or SurI	DO <sub>2</sub> Red	comme							0	5:00		
AIR/O2	15	4:20 Decompress 4:00	AIR/O <sub>2</sub> AIR AIR/O <sub>2</sub> sion or SurI	DO <sub>2</sub> Rec	comme										
15		Decompress 4:00	AIR AIR/O <sub>2</sub> sion or Sur[	DO <sub>2</sub> Red	comme							2	7:00	0.5	F
Name		Decompress 4:00	AIR/O <sub>2</sub> sion or Sur[	DO <sub>2</sub> Red	comme							1	6:00		
In-Water Air/O2   Decompression or SurDO2   Recommended	In-Water Air/O <sub>2</sub> D	4:00	sion or SurI	DO <sub>2</sub> Red	comme							8	13:00	0.5	Н
20	In-Water Air/O <sub>2</sub> D	4:00	AIR	OO <sub>2</sub> Red	comme							5	10:00		
AIR/O2						nded -									
25 4:00 AIR AIR/O <sub>2</sub> 30 3:40 AIR AIR/O <sub>2</sub> 31 AIR/O <sub>2</sub> 32 A140  Exceptional Exposure: In-Water Air Decompression ————————————————————————————————————	20	4.00	AID/O								2	15	21:40	0.5	K
AIR/O2		4.00	AIR/O <sub>2</sub>								1	8	13:40		
30   3:40   AIR     4   7   45   60:20   1.5   6   6   2	25	4:00	AIR								7	29	40:40	1	M
AIR/O2			_								4	14	22:40		
Exceptional Exposure: In-Water Air Decompression	30	3:40								4	7	45		1.5	Ο
35 3:40 AIR AIR/O2 AIR AIR/O2 AIR AIR/O2 AIR															
AIR/O <sub>2</sub> 40 3:20 AIR 40 AIR/O <sub>2</sub> 20 6 7 35 59:20  45 3:20 AIR 45 AIR/O <sub>2</sub> 30 8 12 40 72:20  50 3:20 AIR 40 14 14 28 170 220:00 2.5  AIR/O <sub>2</sub> 40 14 14 46 87:20  Exceptional Exposure: In-Water Air/O <sub>2</sub> Decompression — SurDO <sub>2</sub> Required————————————————————————————————————				compres	sion		In-Wa	ter Air/	O <sub>2</sub> Dec						_
40 3:20 AIR 2 6 14 106 132:00 2 AIR/O2 2 6 7 35 59:20  45 3:20 AIR 3 8 24 142 181:00 2 AIR/O2 3 8 12 40 72:20  50 3:20 AIR 4 14 28 170 220:00 2.5 AIR/O2 4 14 14 46 87:20  Exceptional Exposure: In-Water Air/O2 Decompression SurDO2 Required  55 3:20 AIR 7 21 28 212 272:00 3 AIR/O2 7 21 14 57 113:20  60 3:20 AIR 11 26 28 248 317:00 3 AIR/O2 11 26 14 67 132:20  70 3:00 AIR 3 24 25 28 330 413:40 4 AIR/O2 3 24 25 14 85 170:00  Exceptional Exposure: SurDO2	35	3:40												1.5	Z
AIR/O <sub>2</sub> 2 6 7 35 59:20  45 3:20 AIR 3 8 24 142 181:00 2  AIR/O <sub>2</sub> 3 8 12 40 72:20  50 3:20 AIR 4 14 28 170 220:00 2.5  AIR/O <sub>2</sub> 4 14 14 46 87:20  Exceptional Exposure: In-Water Air/O <sub>2</sub> Decompression SurDO <sub>2</sub> Required  55 3:20 AIR 7 21 28 212 272:00 3  AIR/O <sub>2</sub> 7 21 14 57 113:20  60 3:20 AIR 11 26 28 248 317:00 3  AIR/O <sub>2</sub> 11 26 14 67 132:20  70 3:00 AIR 3 24 25 28 330 413:40 4  AIR/O <sub>2</sub> 3 24 25 14 85 170:00  Exceptional Exposure: SurDO <sub>2</sub> Exceptional Exposure: SurDO <sub>2</sub> AIR  AIR/O <sub>2</sub> 15 23 26 35 430 532:40 4.5  AIR/O <sub>2</sub> 15 23 26 18 104 205:00  90 2:40 AIR 3 22 23 26 47 496 620:20 5.5			_												_
A1R   3	40	3:20												2	Z
AIR/O <sub>2</sub> 50 3:20 AIR  AIR/O <sub>2</sub> AIR/O <sub>2</sub> AIR/O <sub>2</sub> AIR/O <sub>2</sub> Exceptional Exposure: In-Water Air/O <sub>2</sub> Decompression — SurDO <sub>2</sub> Required————————————————————————————————————	45	0.00												0	7
50       3:20       AIR       4       14       28       170       220:00       2.5         AIR/O2       4       14       14       46       87:20         Exceptional Exposure: In-Water Air/O2 Decompression       SurDO2 Required         55       3:20       AIR       7       21       28       212       272:00       3         AIR/O2       7       21       14       57       113:20       3       3       3       24       28       248       317:00       3       3       3       3       24       25       28       248       317:00       3       3       3       24       25       28       330       413:40       4	45	3:20												2	Z
AIR/O2       4       14       14       14       14       14       14       14       14       46       87:20       AIR/O2       7       21       28       212       272:00       3         60       3:20       AIR       11       26       28       248       317:00       3         AIR/O2       11       26       14       67       132:20       11       26       14       67       132:20       11       26       14       67       132:20       11       26       14       67       132:20       11       26       14       67       132:20       12       12       12       12       12       12       28       330       413:40       4       5       1       4 <td>50</td> <td>0.00</td> <td>_</td> <td></td> <td>0.5</td> <td>7</td>	50	0.00	_											0.5	7
Exceptional Exposure: In-Water Air/0 <sub>2</sub> Decompression ————————————————————————————————————	50	3:20												2.5	Z
55       3:20       AIR       7       21       28       212       272:00       3         AIR/O2       7       21       14       57       113:20         60       3:20       AIR       11       26       28       248       317:00       3         AIR/O2       11       26       14       67       132:20         70       3:00       AIR       3       24       25       28       330       413:40       4         AIR/O2       3       24       25       14       85       170:00         Exceptional Exposure: SurDO2	Eventional Eve	auro: In M		Docomo	rossio		- Cu	*DO E			14	46	87:20		
AIR/O <sub>2</sub> 7 21 14 57 113:20  60 3:20 AIR 11 26 28 248 317:00 3  AIR/O <sub>2</sub> 11 26 14 67 132:20  70 3:00 AIR 3 24 25 28 330 413:40 4  AIR/O <sub>2</sub> 3 24 25 14 85 170:00  Exceptional Exposure: SurDO <sub>2</sub> 80 3:00 AIR 15 23 26 35 430 532:40 4.5  AIR/O <sub>2</sub> 15 23 26 18 104 205:00  90 2:40 AIR 3 22 23 26 47 496 620:20 5.5				Decomp	ressio	1	Su	IDO <sub>2</sub> R			20	212	272:00	2	
60 3:20 AIR 11 26 28 248 317:00 3  AIR/O₂ 11 26 14 67 132:20  70 3:00 AIR 3 24 25 28 330 413:40 4  AIR/O₂ 3 24 25 14 85 170:00  Exceptional Exposure: SurDO₂  80 3:00 AIR 15 23 26 35 430 532:40 4.5  AIR/O₂ 15 23 26 18 104 205:00  90 2:40 AIR 3 22 23 26 47 496 620:20 5.5	55	3.20												S	
AIR/O <sub>2</sub> 11 26 14 67 132:20  70 3:00 AIR 3 24 25 28 330 413:40 4  AIR/O <sub>2</sub> 3 24 25 14 85 170:00  Exceptional Exposure: SurDO <sub>2</sub> 80 3:00 AIR 15 23 26 35 430 532:40 4.5  AIR/O <sub>2</sub> 15 23 26 18 104 205:00  90 2:40 AIR 3 22 23 26 47 496 620:20 5.5	60	3.20	_											3	
70     3:00     AIR     3     24     25     28     330     413:40     4       Exceptional Exposure: SurDO2       80     3:00     AIR     15     23     26     35     430     532:40     4.5       AIR/O2     15     23     26     18     104     205:00       90     2:40     AIR     3     22     23     26     47     496     620:20     5.5	00	0.20												O	
AIR/O2     3     24     25     14     85     170:00       Exceptional Exposure: SurDO2       80     3:00     AIR     15     23     26     35     430     532:40     4.5       AIR/O2     15     23     26     18     104     205:00       90     2:40     AIR     3     22     23     26     47     496     620:20     5.5	70	3.00						3						4	
Exceptional Exposure: SurDO2         80       3:00       AIR       15       23       26       35       430       532:40       4.5         AIR/O2       15       23       26       18       104       205:00         90       2:40       AIR       3       22       23       26       47       496       620:20       5.5	. •	0.00												•	
80 3:00 AIR 15 23 26 35 430 532:40 4.5 AIR/O <sub>2</sub> 15 23 26 <b>18 104</b> 205:00 90 2:40 AIR 3 22 23 26 47 496 620:20 5.5	Exceptional Expo	sure: SurE													1
AIR/O <sub>2</sub> 15 23 26 <b>18 104</b> 205:00 90 2:40 AIR 3 22 23 26 47 496 620:20 5.5								15	23	26	35	430	532:40	4.5	
90 2:40 AIR 3 22 23 26 47 496 620:20 5.5															
	90	2:40					3							5.5	
AIR/O <sub>2</sub> 3 22 23 26 <b>24 118</b> 239:40			AIR/O <sub>2</sub>				3	22	23	26	24	118	239:40		
120 2:20 AIR 3 20 22 23 50 75 608 804:00 8	120	2:20				3	20	22	23	50	75	608	804:00	8	
AIR/O <sub>2</sub> 3 20 22 23 50 <b>37 168</b> 356:20			AIR/O <sub>2</sub>			3	20	22	23	50	37	168	356:20		
	180	2:00	AIR		2	19	20	42	48	79	121	694	1027:40	10.5	
			AIR/O <sub>2</sub>		2	19	20	42	48	79	58	222	538:00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100	90	DECOI Stop tin exce 80	nes (mi		de trave	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
7	5:20	AIR									0	5:20	0	Е
		AIR/O <sub>2</sub>									0	5:20		
10	4:40	AIR									4	9:20	0.5	F
		AIR/O <sub>2</sub>									2	7:20		
15	4:20	AIR								2	10	17:00	0.5	I
		AIR/O <sub>2</sub>								1	6	12:00		
In-Water Air/O <sub>2</sub> [			00 <sub>2</sub> Re	comme	ended -									
20	4:00	AIR							1	4	19	28:40	0.5	L
		AIR/O <sub>2</sub>							1	2	10	18:00		
25	4:00	AIR							4	7	35	50:40	1	N
		AIR/O <sub>2</sub>							4	4	17	30:00		
30	3:40	AIR						2	6	7	62	81:20	1.5	Z
	1	AIR/O <sub>2</sub>						2	6	4	26	42:40		
Exceptional Expe	osure: In-W	ater Air Ded	compre	ssion		In-Wa	ter Air/0	O <sub>2</sub> Dec	ompres	sion or	SurDO	2 Required		
35	3:40	AIR						4	6	8	89	111:20	1.5	Z
		AIR/O <sub>2</sub>						4	6	4	34	57:40		
40	3:40	AIR						6	6	21	134	171:20	2	Z
		AIR/O <sub>2</sub>						6	6	11	38	70:40		
45	3:20	AIR					2	5	11	28	166	216:00	2.5	Z
		AIR/O <sub>2</sub>					2	5	11	14	45	86:20		
Exceptional Exp	osure: In-W	ater Air/0 <sub>2</sub> I	Decomp	oressio	n	Su	rDO <sub>2</sub> R	equired	j					
50	3:20	AIR					2	8	19	28	207	268:00	3	
		AIR/O <sub>2</sub>					2	8	19	15	55	113:20		
55	3:20	AIR					3	11	26	28	248	320:00	3	
		AIR/O <sub>2</sub>					3	11	26	14	67	135:20		
60	3:20	AIR					6	17	25	29	291	372:00	3.5	
		AIR/O <sub>2</sub>					6	17	25	15	77	154:20		
Exceptional Exp	osure: Sur[	002												
70	3:20	AIR					15	23	26	29	399	496:00	4.5	
		AIR/O <sub>2</sub>					15	23	26	15	99	197:20		
80	3:00	AIR				6	21	24	25	44	482	605:40	5.5	
		AIR/O <sub>2</sub>				6	21	24	25	23	114	237:00		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

	Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100		Stop tir	MPRES nes (mi pt first a	n) inclu	de trav	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
1	70 FSW														
	6	5:40	AIR									0	5:40	0	D
			AIR/O <sub>2</sub>									0	5:40		
	10	5:00	AIR									6	11:40	0.5	G
_			AIR/O <sub>2</sub>									3	8:40		
In	-Water Air/O <sub>2</sub> [	Decompres	sion or Sur[	OO <sub>2</sub> Re	comme	nded -									
	15	4:40	AIR								3	13	21:20	0.5	J
			AIR/O <sub>2</sub>								2	6	13:20		
	20	4:20	AIR							3	6	24	38:00	1	M
			AIR/O <sub>2</sub>							3	3	12	23:20		
	25	4:00	AIR						1	7	7	41	60:40	1	0
			AIR/O <sub>2</sub>						1	7	4	20	37:00		
Е	xceptional Expo	osure: In-W	ater Air Dec	compres	sion		In-Wa	ter Air/	O <sub>2</sub> Dec		sion or	SurDC	2 Required		
	30	4:00	AIR						5	7	7	77	100:40	1.5	Z
			AIR/O <sub>2</sub>						5	7	3	30	50:00		
	35	3:40	AIR					2	6	6	15	120	153:20	2	Z
			AIR/O <sub>2</sub>					2	6	6	8	37	68:40		
	40	3:40	AIR					4	6	9	25	158	206:20	2.5	Z
_			AIR/O <sub>2</sub>					4	6	9	12	44	84:40		
Е	xceptional Expo	osure: In-W	/ater Air/0 <sub>2</sub> [	Decomp	ressio	າ	Su	rDO <sub>2</sub> F	equire	<u></u>					
	45	3:40	AIR					5	7	16	28	197	257:20	2.5	Z
			AIR/O <sub>2</sub>					5	7	16	14	53	109:40		
	50	3:20	AIR				1	5	11	23	28	244	316:00	3	
			AIR/O <sub>2</sub>				1	5	11	23	14	66	134:20		
	55	3:20	AIR				2	7	16	26	28	289	372:00	3.5	
			AIR/O <sub>2</sub>				2	7	16	26	14	77	156:20		
	60	3:20	AIR				2	11	21	26	28	344	436:00	4	
_			AIR/O <sub>2</sub>				2	11	21	26	14	88	181:20		
Е	xceptional Expo	osure: SurE	002												
	70	3:20	AIR				7	19	24	25	39	454	572:00	5	
			AIR/O <sub>2</sub>				7	19	24	25	20	109	228:20		
	80	3:20	AIR				17	22	23	26	53	525	670:00	6	
			AIR/O <sub>2</sub>				17	22	23	26	27	128	267:20		
	90	3:00	AIR			8	19	22	23	37	66	574	752:40	7	
			AIR/O <sub>2</sub>			8	19	22	23	37	33	148	319:00		
	120	2:40	AIR		9	19	20	22	42	60	94	659	928:20	9	
			AIR/O <sub>2</sub>		9	19	20	22	42	60	46	198	454:40		
	180	2:20	AIR AIR/O <sub>2</sub>	10	18	19	40	43	70	97	156	703	1159:00	11.5	

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

	Time to First				Stop tin	nes (mi	,	de trav	el time,			Total Ascent	Chamber	
Bottom Time (min)	Stop (M:S)	Gas Mix	100	90	80	70	air and f	50	40	30	20	Time (M:S)	O <sub>2</sub> Periods	Repet Group
180 FSW														
6	6:00	AIR									0	6:00	0	Е
		AIR/O <sub>2</sub>									0	6:00		
10	5:20	AIR									8	14:00	0.5	G
		AIR/O <sub>2</sub>									4	10:00		
In-Water Air/O <sub>2</sub> I	Decompres	sion or Surl	DO <sub>2</sub> Re	comme	nded -									
15	4:40	AIR							2	3	14	24:20	0.5	K
		AIR/O <sub>2</sub>							2	2	7	16:40		
20	4:20	AIR						1	5	7	29	47:00	1	М
		AIR/O <sub>2</sub>						1	5	3	15	29:20		
25	4:20	AIR						5	6	7	57	80:00	1.5	0
		AIR/O <sub>2</sub>						5	6	4	24	44:20		
Exceptional Exp	osure: In-W	ater Air De	compres	ssion		In-Wa	ater Air/	O <sub>2</sub> Dec	ompres	sion or	SurDC	2 Required		
30	4:00	AIR					3	6	6	7	95	121:40	1.5	Z
		AIR/O <sub>2</sub>					3	6	6	4	34	63:00		
35	3:40	AIR				1	5	6	6	22	144	188:20	2	Z
		AIR/O <sub>2</sub>				1	5	6	6	11	41	79:40		
Exceptional Exp	osure: In-W	ater Air/0 <sub>2</sub> l	Decomp	ressio	n	Su	ırDO <sub>2</sub> R	equire	d					
40	3:40	AIR				2	6	5	13	28	178	236:20	2.5	
		AIR/O <sub>2</sub>				2	6	5	13	14	48	97:40		
45	3:40	AIR				4	5	10	20	28	235	306:20	3	
		AIR/O <sub>2</sub>				4	5	10	20	14	63	130:40		
50	3:40	AIR				4	8	13	25	29	277	360:20	3.5	
		AIR/O <sub>2</sub>				4	8	13	25	15	75	154:40		
55	3:40	AIR				5	11	19	26	28	336	429:20	4	
		AIR/O <sub>2</sub>				5	11	19	26	14	87	181:40		
Exceptional Exp	osure: Sur[	002												
60	3:20	AIR			1	8	13	23	25	31	406	511:00	4.5	
		AIR/O <sub>2</sub>			1	8	13	23	25	16	100	205:20		
70	3:20	AIR			4	12	21	24	25	48	499	637:00	5.5	
		AIR/O <sub>2</sub>			4	12	21	24	25	24	119	253:20		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time (min)	Time to First Stop (M:S)	Gas Mix	100		DECOI Stop tin exce 80		n) inclu	de trav	el time,	30	20	Total Ascent Time (M:S)	Chamber O <sub>2</sub> Periods	Repet Group
5	6:20	AIR									0	6:20	0	D
		AIR/O <sub>2</sub>									0	6:20		
10	5:20	AIR AIR/O <sub>2</sub>								2 1	8 <b>4</b>	16:00 11:00	0.5	Н
In-Water Air/O <sub>2</sub> [	Decompres	sion or Sur	00 <sub>2</sub> Re	comme	nded -									
15	4:40	AIR AIR/O <sub>2</sub>						1	3	3 <b>2</b>	16 <b>8</b>	28:20 19:40	0.5	K
20	4:20	AIR					1	2	6	7	34	55:00	1	N
		AIR/O <sub>2</sub>					1	2	6	4	17	35:20		
Exceptional Expe	osure: In-W	ater Air Ded	compres	ssion		In-Wa	ter Air/	O <sub>2</sub> Dec	ompres	sion or	SurDC	D <sub>2</sub> Required		
25	4:20	AIR					2	6	7	7	72	99:00	1.5	Z
		AIR/O <sub>2</sub>					2	6	7	3	28	51:20		
30	4:00	AIR				1	6	5	7	13	122	158:40	2	Z
		AIR/O <sub>2</sub>				1	6	5	7	7	38	74:00		
Exceptional Exp			Decomp	ressio	1									
35	4:00	AIR				4	5	6	8	26	165	218:40	2.5	Z
		AIR/O <sub>2</sub>				4	5	6	8	13	45	91:00		
40	3:40	AIR			1	5	5	8	17	28	217	285:20	3	
. –		AIR/O <sub>2</sub>			1	5	5	8	17	15	58	123:40		
45	3:40	AIR			2	5	6	12	24	29	264	346:20	3.5	
	0.40	AIR/O <sub>2</sub>			2	5	6	12	24	15	71	149:40		
50	3:40	AIR			3	5	10	17	26	28	324	417:20	4	
E		AIR/O <sub>2</sub>			3	5	10	17	26	14	85	179:40		
Exceptional Expo					4		40	0.4	05	20	207	500.00	4.5	
55	3:40	AIR			4	8	10	24 24	25 25	30 <b>15</b>	397 <b>99</b>	502:20	4.5	
60	3:40	AIR/O <sub>2</sub>			4 5	10	10 16	24	25 25	<b>15</b>	<b>99</b> 454	204:40 578:20	5	
00	J.40	AIR/O <sub>2</sub>			5 5	10	16	24	25 25	<b>20</b>	109	233:40	J	
90	3:20	AIR/O <sub>2</sub>		11	19	20	21	28	51	83	626	863:00	8.5	
30	0.20	AIR/O <sub>2</sub>		11	19	20	21	28	51	41	178	408:20	0.0	
120	3:00	AIR AIR	15	17	19	20	37	46	79	113	691	1040:40	10.5	
120	0.00	AIR/O <sub>2</sub>	15	17	19	20	37	46	79	55	219	551:00	10.0	

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop				Stop tir	MPRES nes (mi	n) inclu	de trav	el time,			Total Ascent Time	Chamber	Panat
(min)	(M:S)	Gas Mix	100	90	80	70	60	50	40	30	20	(M:S)	O <sub>2</sub> Periods	Repet Group
200 FSW														
Exceptional Exp														
5	6:40	AIR AIR/O <sub>2</sub>									0 <b>0</b>	6:40 6:40	0	E
10	F: 40	_								2			0.5	
10	5:40	AIR AIR/O <sub>2</sub>								3 <b>2</b>	8 <b>4</b>	17:20 12:20	0.5	Н
15	5:00	AIR						2	3	5	19	34:40	0.5	L
.0	0.00	AIR/O <sub>2</sub>						2	3	3	9	23:00	0.0	_
20	4:40	AIR					2	4	6	7	43	67:20	1	0
		AIR/O <sub>2</sub>					2	4	6	4	20	41:40		
25	4:20	AIR				1	5	6	6	7	85	115:00	1.5	Z
		AIR/O <sub>2</sub>				1	5	6	6	4	32	64:20		
30	4:20	AIR				4	6	5	7	19	145	191:00	2	Z
		AIR/O <sub>2</sub>				4	6	5	7	10	42	84:20		
35	4:00	AIR			2	5	5	6	13	28	188	251:40	2.5	
		AIR/O <sub>2</sub>			2	5	5	6	13	14	51	106:00		
40	4:00	AIR			4	5	5	11	21	28	249	327:40	3.5	
		AIR/O <sub>2</sub>			4	5	5	11	21	14	68	143:00		
45	3:40	AIR		1	4	5	10	14	25	28	306	397:20	3.5	
		AIR/O <sub>2</sub>		1	4	5	10	14	25	14	81	168:40		
50	3:40	AIR		2	4	8	10	21	26	28	382	485:20	4.5	
210 FSW		AIR/O <sub>2</sub>		2	4	8	10	21	26	14	97	201:40		
Exceptional Exp		A.ID										7.00		
4	7:00	AIR									0	7:00 7:00	0	D
5	6:20	AIR/O <sub>2</sub> AIR									2	9:00	0.5	Е
5	0.20	AIR/O <sub>2</sub>									1	8:00	0.5	_
10	5:40	AIR AIR							2	3	9	20:20	0.5	ı
10	3.40	AIR/O <sub>2</sub>							2	2	4	14:40	0.5	'
15	5:00	AIR					1	3	3	6	24	42:40	1	М
		AIR/O <sub>2</sub>					1	3	3	3	12	28:00	•	
20	4:40	AIR				1	3	5	6	7	57	84:20	1	0
		AIR/O <sub>2</sub>				1	3	5	6	4	23	47:40		
25	4:40	AIR				3	6	5	7	8	110	144:20	2	Z
		AIR/O <sub>2</sub>				3	6	5	7	4	38	73:40		
30	4:20	AIR			2	5	6	6	6	26	163	219:00	2.5	Z
		AIR/O <sub>2</sub>			2	5	6	6	6	13	45	93:20		
35	4:00	AIR		1	4	5	6	7	18	28	223	296:40	3	
		AIR/O <sub>2</sub>		1	4	5	6	7	18	14	60	130:00		
40	4:00	AIR		2	5	5	7	11	26	28	278	366:40	3.5	
		AIR/O <sub>2</sub>		2	5	5	7	11	26	14	76	161:00		
45	4:00	AIR		4	4	6	11	18	26	28	355	456:40	4	
		AIR/O <sub>2</sub>		4	4	6	11	18	26	14	91	194:00		
50	3:40	AIR	1	4	5	10	12	23	26	36	432	553:20	5	
		AIR/O <sub>2</sub>	1	4	5	10	12	23	26	18	105	223:40		

**Table 9-9.** Air Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

	Time to First					top tim	es (m	in) in	clude	trave	l time				Total Ascent	Chamber	
Bottom Time (min)	Stop (M:S)	Gas Mix	130	120	110	100		80		_	-	40	30	20	Time (M:S)	O <sub>2</sub> Periods	Repet Group
220 FSW			'												'		
Exceptional Exp	osure																
4	7:20	AIR AIR/O <sub>2</sub>												0 <b>0</b>	7:20 7:20	0	Е
5	6:40	AIR AIR/O <sub>2</sub>												3 <b>2</b>	10:20 9:20	0.5	E
10	6:00	AIR AIR/O <sub>2</sub>										3	4 <b>2</b>	10 <b>5</b>	23:40 17:00	0.5	J
15	5:20	AIR AIR/O <sub>2</sub>								3 3	2 2	4 4	7 <b>4</b>	28 <b>14</b>	50:00 33:20	1	N
20	5:00	AIR AIR/O <sub>2</sub>							2	4	6 6	6 6	7 <b>4</b>	70 <b>26</b>	100:40 54:00	1.5	Z
25	4:40	AIR AIR/O <sub>2</sub>						1 1	5 5	6 6	6 6	6 6	14 <b>7</b>	133 <b>41</b>	176:20 82:40	2	Z
30	4:20	AIR AIR/O <sub>2</sub>					1 1	4 4	5 5	6 6	6 6	10 10	28 <b>14</b>	183 <b>50</b>	248:00 106:20	2.5	
35	4:20	AIR AIR/O <sub>2</sub>					3 3	5 5	5 5	5 5	10 10	22 22	28 <b>14</b>	251 <b>68</b>	334:00 147:20	3.5	
40	4:00	AIR AIR/O <sub>2</sub>				1 1	4 4	5 5	5 5	9	15 15	26 26	28 <b>14</b>	319 <b>84</b>	416:40 183:00	4	
250 FSW		_															
Exceptional Exp	osure																
4	7:40	AIR AIR/O <sub>2</sub>												4 2	12:20 10:20	0.5	F
5	7:40	AIR AIR/O <sub>2</sub>												7 <b>4</b>	15:20 12:20	0.5	G
10	6:20	AIR AIR/O <sub>2</sub>								2	2 2	4 4	3 <b>2</b>	15 <b>7</b>	33:00 24:20	0.5	L
15	5:40	AIR AIR/O <sub>2</sub>						2 2	2	3	4	6 6	7 <b>4</b>	53 <b>22</b>	83:20 49:40	1	0
20	5:20	AIR AIR/O <sub>2</sub>					2	2	4	6	6	6	11 <b>6</b>	125 <b>39</b>	168:00 82:20	2	Z
25	5:00	AIR AIR/O <sub>2</sub>				1	4	4	5	6	6	10 10	28 <b>14</b>	189 <b>51</b>	258:40 112:00	2.5	
30	4:40	AIR AIR/O <sub>2</sub>			1 1	4	4	4	5	6	9	25 25	28 <b>15</b>	267 <b>72</b>	358:20 160:40	3.5	
35	4:40	AIR AIR/O <sub>2</sub>			3	4	4	5 5	5 5	10 10	19 19	26 26	28 <b>14</b>	363 <b>93</b>	472:20 203:40	4	

Bottom Time	Time to First Stop	Gas			S	top tim excep	es (m	in) in	clude	trave t O <sub>2</sub> :	l time	•			Total Ascent Time	Chamber O <sub>2</sub>	Repet
(min)	(M:S)	Mix	130	120	110	100	90	80	70	60	50	40	30	20	(M:S)	Periods	Group

## **300 FSW**

Exceptional E	xposure																
4	9:00	AIR											3	7	19:40	0.5	G
		AIR/O <sub>2</sub>											2	4	15:40		
5	8:40	AIR										3	3	8	23:20	0.5	1
		AIR/O <sub>2</sub>										3	2	4	18:40		
10	7:20	AIR						2	3	2	3	4	7	35	64:00	1	Ν
		AIR/O <sub>2</sub>						2	3	2	3	4	4	18	44:20		
15	6:20	AIR			1	2	2	3	3	5	6	7	11	125	172:00	2	Z
		AIR/O <sub>2</sub>			1	2	2	3	3	5	6	7	6	39	86:20		
20	6:00	AIR		2	2	2	4	5	5	5	6	16	28	219	300:40	3	
		AIR/O <sub>2</sub>		2	2	2	4	5	5	5	6	16	14	59	137:00		
25	5:40	AIR	1	3	4	4	4	5	5	5	18	26	28	324	433:20	4	
		AIR/O <sub>2</sub>	1	3	4	4	4	5	5	5	18	26	14	85	195:40		

Table 10-1. Equivalent Air Depth Table.

Diver's								EAD	Feet	,						
Actual Depth (fsw)	25% O <sub>2</sub>	26% O <sub>2</sub>	27% O <sub>2</sub>	28% O <sub>2</sub>	29% O <sub>2</sub>	30% O <sub>2</sub>	31% O <sub>2</sub>	32% O <sub>2</sub>	33% O <sub>2</sub>	34% O <sub>2</sub>	35% O <sub>2</sub>	36% O <sub>2</sub>	37% O <sub>2</sub>	38% O <sub>2</sub>	39% O <sub>2</sub>	40% O <sub>2</sub>
20	20	20	20	20	20	20	20	15	15	15	15	15	10	10	10	10
30	30	30	30	30	30	30	30	25	25	25	20	20	20	20	20	20
40	40	40	40	40	40	40	40	35	30	30	30	30	30	30	25	25
50	50	50	50	50	50	50	50	40	40	40	40	40	35	35	35	35
60	60	60	60	60	60	60	50	50	50	50	50	50	50	50	40	40
70	70	70	70	70	70	60	60	60	60	60	60	60	50	50	50	50
80	80	80	80	80	70	70	70	70	70	70	70	60	60	60	60	60
90	90	90	90	90	80	80	80	80	80	80	70	70	70 (:107)	70 (:80)	70 (:61)	70 (:47)
100	100	100	100	90	90	90	90	90	90	80 (:113)	80 (:82)	80 (:61)	80 (:46)	80 (:36)	80 (:29)	70 (:23)
110	110	110	110	100	100	100	100	100 (:96)	100 (:69)	90 (:51)	90 (:39)	90 (:30)				
120	120	120	120	110	110	110 (:91)	110 (:64)	110 (:47)	100 (:35)	100 (:27)						
130	130	130	120	120 (:95)	120 (:65)	120 (:47)	120 (:35)	110 (:26)								
140	140	140 (:109)	130 (:73)	130 (:50)	130 (:36)											
150	150 (:89)	150 (:59)	140 (:41)													
160	160 (:50)	160 (:35)														

EAD

= Equivalent Air Depth - For Decompression Table Selection Only Rounded to Next Greater Depth

= 1.4 ata Normal working limit.

Depth exceeds the normal working limit, requires the Commanding Officer's authorization and surfacesupplied equipment. Repetitive dives are not authorized. Times listed in parentheses indicate maximum allowable exposure.

Note<sup>1</sup>: Depths not listed are considered beyond the safe limits of NITROX diving.

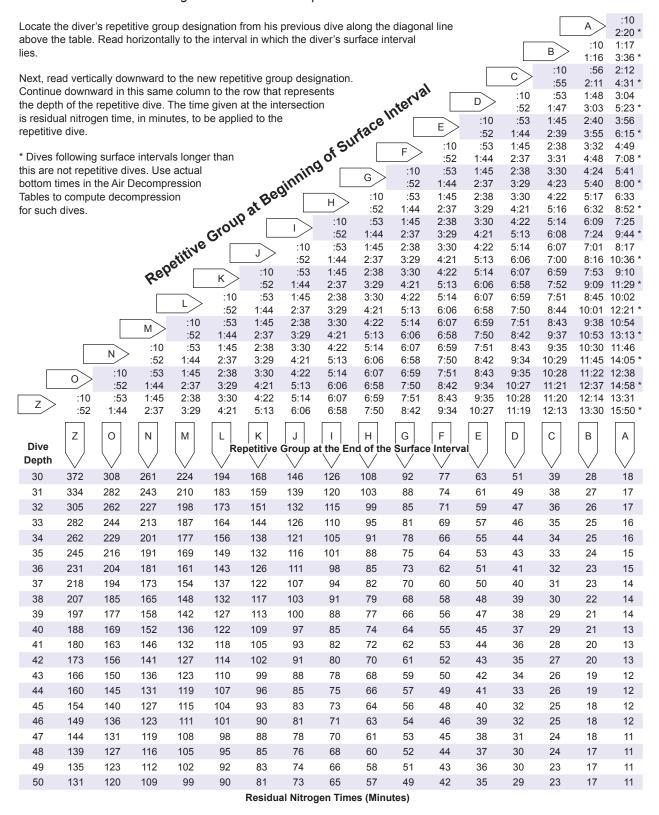
Note<sup>2</sup>:

The EAD, 1.4 ata Normal Working Limit Line and Maximum Allowable Exposure Time for dives deeper than the Normal Working Limit Line are calculated assuming the diver rounds the oxygen percentage in the gas mixture using the standard rounding rule discussed in paragraph 10-4.1. The calculations also take into account the allowable  $\pm$  0.5 percent error in gas analysis.

**Table 2A-1.** No-Decompression Limits and Repetitive Group Designators for Shallow Water Air No-Decompression Dives.

Depth	No-Stop						Re	petitiv	/e Gro	up Des	ignatio	on					
(fsw)	Limit (min)	Α	В	С	D	E	F	G	Н		J	K	L	М	N	0	Z
30	371	17	27	38	50	62	76	91	107	125	145	167	193	223	260	307	371
31	334	16	26	37	48	60	73	87	102	119	138	158	182	209	242	282	334
32	304	15	25	35	46	58	70	83	98	114	131	150	172	197	226	261	304
33	281	15	24	34	45	56	67	80	94	109	125	143	163	186	212	243	281
34	256	14	23	33	43	54	65	77	90	104	120	137	155	176	200	228	256
35	232	14	23	32	42	52	63	74	87	100	115	131	148	168	190	215	232
36	212	14	22	31	40	50	61	72	84	97	110	125	142	160	180	204	212
37	197	13	21	30	39	49	59	69	81	93	106	120	136	153	172	193	197
38	184	13	21	29	38	47	57	67	78	90	102	116	131	147	164	184	
39	173	12	20	28	37	46	55	65	76	87	99	112	126	141	157	173	
40	163	12	20	27	36	44	53	63	73	84	95	108	121	135	151	163	
41	155	12	19	27	35	43	52	61	71	81	92	104	117	130	145	155	
42	147	11	19	26	34	42	50	59	69	79	89	101	113	126	140	147	
43	140	11	18	25	33	41	49	58	67	76	87	98	109	122	135	140	
44	134	11	18	25	32	40	48	56	65	74	84	95	106	118	130	134	
45	125	11	17	24	31	39	46	55	63	72	82	92	102	114	125		
46	116	10	17	23	30	38	45	53	61	70	79	89	99	110	116		
47	109	10	16	23	30	37	44	52	60	68	77	87	97	107	109		
48	102	10	16	22	29	36	43	51	58	67	75	84	94	102			
49	97	10	16	22	28	35	42	49	57	65	73	82	91	97			
50	92	9	15	21	28	34	41	48	56	63	71	80	89	92			

Table 2A-2. Residual Nitrogen Time Table for Repetitive Shallow Water Air Dives.



**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	op time							( <b>fsw)</b> HeO <sub>2</sub> a		t O <sub>2</sub> st	ор				
	Bottom	Time to	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	Time (min.)	First Stop (min:sec)					воттс	M MIX							50%	6 O <sub>2</sub>			100	% O <sub>2</sub>	
60	10	2:00																		0	0
60	20	2:00																		0	0
	30	2:00																	,	0	0
	40	2:00																		0	0
Max O <sub>2</sub> =40.0%	60	0:40																10	11	16	1
Min O <sub>2</sub> =14.0%	80	0:40																10	13	22	2
	100	0:40																10	16	27	2
l	120	0:40																10	17	28	2
<b>7</b> 0	10	2:20																		0	0
70	20	2:20																		0	0
İ	30	2:20																		0	0
	40	1:00																10	10	16	1
Max O <sub>2</sub> =40.0%	60	1:00																10	14	24	2
Min O <sub>2</sub> =14.0%	80	1:00																10	18	30	2
ļ	100	1:00																10	19	34	2
Į	120	1:00																10	21	37	2
ı		T																			
80	10	2:40																		0	0
00	20	2:40																		0	0
	25 30	2:40																10	44	0 16	0
14. 0. 00.00/	40	1:20 1:20																10	11 13	21	2
Max O <sub>2</sub> =38.0% Min O <sub>2</sub> =14.0%	60	1:20																10	18	32	2
Wiiii 02 77.070	80	1:20																10	21	38	2
	100	1:20																10	24	42	3
İ	120	1:20																10	25	45	3
ı	120	1.20																10			
00	10	3:00																		0	0
90	20	3:00																		0	0
	30	1:40																10	13	21	2
İ	40	1:40																10	16	26	2
Max O <sub>2</sub> =34.9%	60	1:40																10	21	38	2
Min O <sub>2</sub> =14.0%	80	1:40																10	25	45	3
[	100	1:40																10	28	50	3
	120	1:40																10	29	52	3

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	op time					on St			) and firs	t O <sub>2</sub> st	ор				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)					вотто	OM MIX							50%	6 O <sub>2</sub>			1009	% O <sub>2</sub>	
400	10	3:20																		0	0
100	15	3:20																		0	0
	20	2:00																10	11	17	1
	30	2:00																10	15	24	2
Max O <sub>2</sub> =32.3%	40	2:00																10	18	32	2
Min $O_2 = 14.0\%$	60	2:00												Ļ				10	25	44	3
	80	2:00																10	28	52	3
	100	2:00												ļ				10	31	56	3
	120	2:00				<u> </u>			<u> </u>									10	32	58	3
	10	2:20				ı			ı			1			1			10	8	11	1 1
110	20	2:20																10	12	20	1
	30	2:20																10	17	28	2
	40	2:20																10	20	36	2
Max O <sub>2</sub> =30.0%	60	2:20																10	27	49	3
Min $O_2$ =14.0%	80	2:20																10	31	58	3
22	100	2:20																10	33	62	4
	Exceptional														·						
	120	2:20																10	35	64	4
420	10	2:40																10	9	13	1
120	20	2:40																10	14	23	2
	30	2:40																10	19	33	2
	40	2:40																10	23	42	3
Max O <sub>2</sub> =28.0%	60	2:40																10	30	55	3
Min $O_2 = 14.0\%$	80	2:40												Ļ				10	34	63	4
	100	2:40																10	36	66	4
	Exceptional I				T				· · · · · · · · · · · · · · · · · · ·		T	1			1		1 40	1 40			
	120	2:20															10	10	35	65	4
	10	2:40	1	1		l	1		l	1		1	<u> </u>	1		1	10	10	6	8	T 1
130	20	2:40															10	10	12	19	1
100	30	2:40															10	10	18	30	2
	40	2:40														7	10	10	22	40	3
Max O <sub>2</sub> =26.3%	60	2:20														7	10	10	29	52	3
Min $O_2$ =14.0%	80	2:20														7	10	10	33	60	3
2 / •	Exceptional																				
	100	2:20														7	10	10	35	64	4
	120	2:20														7	11	11	35	66	4

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

							an time					on St				40					
						) SI	op ume	28 (11111	i) iriciu	ue trav	ei iime	, excep	) LIII'S LI	1eO <sub>2</sub> 8	and firs	$10_2 \text{ sc}$	op r				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)		•			BOTTO	M MIX				•			50%	6 O <sub>2</sub>		•	1009	% O <sub>2</sub>	
4.40	10	3:00															10	10	6	8	1
140	20	3:00															10	10	12	19	1
	30	3:00															10	10	18	30	2
	40	2:40														7	10	10	22	40	2
Max O <sub>2</sub> =24.8%	60	2:40														7	10	10	29	52	3
Min $O_2 = 14.0\%$	80	2:40														7	10	10	33	60	3
	Exceptional E																				
	100	2:40														7	10	10	35	64	4
	120	2:40														7	11	11	35	66	4
	10	3:20	_	1		ı —	_										10	10	7	8	1 1
150	20	3:00														7		10	14	_	2
100	_																10			22	
	30 40	3:00 3:00														7	10	10	19 24	34	2
Ma O =00.40/	60	3:00				<u> </u>										7	10	10	31	44 56	3
Max $O_2$ =23.4% Min $O_2$ =14.0%	80	3:00														7	10	10	35	64	4
WIII 02-14.076	Exceptional E			<u> </u>	l	<u> </u>			<u> </u>		<u> </u>				<u> </u>	1	10	1 10	33	04	4
	100	3:00	1	T	1	1	1	<u> </u>	1		1	1		<u> </u>	1	7	13	13	36	66	   4
	120	3:00														9	16	16	36	66	5
	120	0.00															10	10	- 00		
400	10	3:20				ĺ										7	10	10	8	10	1
160	20	3:20				ĺ										7	10	10	15	24	2
	30	3:20														7	10	10	21	37	2
	40	3:20		İ												7	10	10	26	47	3
	60	3:00		İ		Ì			Ì						7	6	10	10	30	56	3
Max $O_2$ =22.2% Min $O_2$ =14.0%	Exceptional E	Exposure																			
WIII 02-14.0%	80	3:00													7	9	10	10	35	66	4
	100	3:00													7	13	14	14	35	66	5
	120	3:00													7	17	17	17	36	66	5
170	10	3:20													7	0	10	10	8	12	1
170	20	3:20													7	0	10	10	16	28	2
	30	3:20													7	1	10	10	23	42	3
	40	3:20													7	4	10	10	28	52	3
Max O <sub>2</sub> =21.1%	60	3:20													7	10	10	10	33	62	4
Min O <sub>2</sub> =14.0%	Exceptional E		1													4.4	4.4	4.4			
-	80	3:20												7	9	14	14	14	35	66	4
	100	3:00												7	5	18	18	18	36	66	5
	120	3:00												7	9	21	21	21	36	66	5

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	top tim	es (mir	Deco	ompr de trav	essic	on St	ops ot first	( <b>fsw)</b> HeO <sub>2</sub> 8	and firs	t O <sub>2</sub> st	ор				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)					вотто	OM MIX							50%	6 O <sub>2</sub>			1009	% O <sub>2</sub>	
4.40	10	3:00															10	10	6	8	1
140	20	3:00	i														10	10	12	19	1
	30	3:00											i				10	10	18	30	2
	40	2:40														7	10	10	22	40	2
Max O <sub>2</sub> =24.8%	60	2:40														7	10	10	29	52	3
Min $O_2 = 14.0\%$	80	2:40														7	10	10	33	60	3
	Exceptional																				
	100	2:40														7	10	10	35	64	4
	120	2:40														7	11	11	35	66	4
	10	2.00		1		1	1	1	1			1		1	1	1	10	1 40	l 7	١ ،	1 4
150	10	3:20	-	-						-						-	10	10	7	8	1
100	20	3:00														7	10	10	14	22	2
	30	3:00		-						-						7	10	10	19	34	2
Ma O =02, 40/	40 60	3:00 3:00	-				1									7	10	10	24	44 56	3
Max $O_2$ =23.4% Min $O_2$ =14.0%	80	3:00														7	10 10	10	31 35	64	3
Wiiii O2-14.076	Exceptional															,	10	1 10	33	04	
	100	3:00	1	T	T	T	T	1	T	T	T	1	Ī	1	T	7	13	13	36	66	4
	120	3:00														9	16	16	36	66	5
400	10	3:20														7	10	10	8	10	1
160	20	3:20														7	10	10	15	24	2
	30	3:20	İ	İ	İ		Ì	İ		İ	İ			İ		7	10	10	21	37	2
	40	3:20			ĺ						ĺ		ĺ			7	10	10	26	47	3
May 0 =22.20/	60	3:00		Î											7	6	10	10	30	56	3
Max $O_2$ =22.2% Min $O_2$ =14.0%	Exceptional	Exposure																			
Wiii 1 02-14.070	80	3:00		ļ						ļ					7	9	10	10	35	66	4
	100	3:00					<u> </u>	ļ						ļ	7	13	14	14	35	66	5
	120	3:00													7	17	17	17	36	66	5
	10	1 0.00						1				1		1			10	1 40		1 40	1 4
170	10	3:20													7	0	10	10	8	12	1
170	20	3:20		ļ			ļ			ļ					7	0	10	10	16	28	2
	30	3:20													7	1	10	10	23	42	3
	40	3:20													7	4	10	10	28	52	3
Max O <sub>2</sub> =21.1%	60 Executional	3:20			<u> </u>	l			l	l	<u> </u>				/	10	10	10	33	62	4
Min $O_2 = 14.0\%$	Exceptional 80	3:20		T	T	T	T	1		T		1	T	1	9	14	14	14	35	66	4
	100	3:00												7	5	18	18	18	36	66	5
	120	3:00												7	9	21	21	21	36	66	5
	120	5.00													9			41	50	00	

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	op time							( <b>fsw)</b> HeO <sub>2</sub> a		t O₂ st	op				
	Bottom	Time to	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	Time (min.)	First Stop (min:sec)					BOTTO	M MIX							50%	ο O <sub>2</sub>			100	 % O₂	
	10	3:40		Ι	1							1			7	0	10	10	9	14	1
180	20	3:40													7	0	10	10	17	30	2
	30	3:40													7	4	10	10	25	45	3
	40	3:20												7	0	8	10	10	30	54	3
	60	3:20	İ											7	5	11	11	11	35	64	4
Max $O_2$ =20.1% Min $O_2$ =14.0%	Exceptional E	xposure																			
WIII O2-14.0%	80	3:20												7	9	15	15	15	36	66	4
	100	3:20												7	13	19	19	19	36	66	5
	120	3:20												7	17	23	23	23	36	66	6
						1												1			1 .
190	10	4:00													7	0	10	10	10	15	1
130	20	3:40												7	0	2	10	10	19	34	2
	30	3:40												7	0	7	10	10	26	46	3
	40	3:40												7	4	9	10	10	31	56	3
M 0 40 00/	Exceptional E		1	·	1									7		40	40	1 40	1 24		
Max $O_2$ =19.2% Min $O_2$ =14.0%	60 80	3:40 3:20											7	7	9	13 18	13 18	13 18	34 36	62 66	5
WIII 02-14.076	100	3:20											7	6	16	21	21	21	36	66	6
	120	3:20											7	8	20	23	23	23	36	66	7
	120	0.20													20			20	00	00	, ,
000	10	4:00												7	0	0	10	10	11	17	1 1
200	20	4:00												7	0	4	10	10	20	36	2
	30	3:40											7	0	3	7	10	10	27	50	3
	40	3:40			İ								7	0	7	10	10	10	31	58	3
	Exceptional E	xposure																			
Max $O_2$ =18.4%	60	3:40											7	4	10	14	14	14	35	66	4
Min O <sub>2</sub> =14.0%	80	3:40											7	8	14	18	18	18	36	66	5
	100	3:40											7	12	17	23	23	23	36	66	6
	120	3:40											8	15	21	23	23	23	36	66	7
	40	1.00				1								l -			1 40	1 40	40	1 40	T 4
210	10	4:20												7	0	0	10	10	12	19	1
210	20	4:00											7	0	1	6	10	10	22	38	2
	30 40	4:00 4:00											7	0	6	7	10	10	29	53	3
		Exposure			<u> </u>								/	3	9	10	10	10	33	60	3
May O =17.79/	60	3:40	T	T	<u> </u>							7	0	9	11	17	17	17	35	66	 5
Max $O_2$ =17.7% Min $O_2$ =10.0%	80	3:40										7	3	11	15	20	20	20	36	66	6
02 10.070	100	3:40										7	6	14	19	23	23	23	36	66	7
	120	3:40										7	8	18	23	23	23	23	36	66	7

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	top time							( <b>fsw</b> )		t O <sub>2</sub> st	ор				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)					вотто	OM MIX							50%	6 O <sub>2</sub>			100	% O <sub>2</sub>	
220	10	4:40												7	0	2	10	10	13	20	1
220	20	4:20											7	0	3	7	10	10	23	41	3
	30	4:20	<u> </u>		<u> </u>								7	2	6	9	10	10	30	54	3
	40	4:00										7	0	6	9	11	11	11	34	62	4
Marr O =47.00/	Exceptional	<del>, '                                   </del>																			
Max $O_2$ =17.0% Min $O_2$ =10.0%	60	4:00										7	4	9	12	18	18	18	36	66	5
Will O <sub>2</sub> -10.076	80	4:00										7	8	12	17	21	21	21	36	66	6
	100	4:00	<u> </u>									7	12	15	20	23	23	23	36	66	7
	120	4:00										8	14	19	23	23	23	23	36	66	8
000	10	4:40											7	0	0	3	10	10	14	22	2
230	20	4:20	ì	Ì								7	0	3	4	7	10	10	24	44	3
	30	4:20	i –	İ	İ							7	0	5	7	10	10	10	31	57	3
	40	4:00	Î								7	0	3	7	9	13	13	13	34	64	4
	Exceptional	Exposure																			
Max O <sub>2</sub> =16.3%	60	4:00									7	0	8	10	14	18	18	18	36	66	6
Min O <sub>2</sub> =10.0%	80	4:00									7	3	10	14	18	23	23	23	36	66	7
	100	4:00			ļ						7	6	12	17	23	23	23	23	36	66	8
	120	4:00									7	7	16	19	23	23	23	23	36	66	8
	10	4:40										7	0	Ι 0	3	4	10	10	14	24	2
240	20	4:40	<del>                                     </del>									7	0	3	5	7	10	10	25	46	3
	30	4:20	i	<u> </u>							7	0	3	6	7	10	10	10	32	58	3
	40	4:20	i –								7	0	5	8	9	14	14	14	35	64	4
	Exceptional	Exposure																			
Max $O_2$ =15.7%	60	4:20		1							7	4	8	11	14	19	19	19	36	66	6
Min O <sub>2</sub> =10.0%	80	4:20	Î								7	7	11	16	18	23	23	23	36	66	7
	100	4:20									7	10	14	19	23	23	23	23	36	66	8
	120	4:00								7	3	12	17	19	23	23	23	23	36	66	8
	10	5:00	1	1		1		1				7	0	Ι 0	3	4	10	10	15	25	2
250	20	4:40									7	0	0	3	7	7	10	10	26	47	3
	30	4:40	<del>                                     </del>	1	<del>                                     </del>						7	0	4	6	8	10	10	10	32	60	4
	40	4:40									7	2	5	9	9	14	14	14	35	64	4
	Exceptional																				
Max O <sub>2</sub> =15.2%	60	4:20								7	0	7	9	12	16	21	21	21	36	66	6
Min O <sub>2</sub> =10.0%	80	4:20	Ì							7	3	9	13	15	21	23	23	23	36	66	7
	100	4:20								7	6	11	14	19	23	23	23	23	36	66	8
	120	4:20								7	8	13	19	20	23	23	23	23	36	66	8

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

									Deco	mpr	essio	on St	ops	(fsw)							
						St	op time									t O <sub>2</sub> st	ор				
																					Chamber
	Bottom	Time to	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	O <sub>2</sub> Periods
5 " (5 )	Time	First Stop										l		<u> </u>					4000		
Depth (fsw)	(min.)	(min:sec)					BOTTC	NI IVIIX							50%				1009		
260	10	5:00									7	0	0	0	4	4	10	10	16	27	2
200	20	5:00								7	7	0	3	4	6	7	10	10	27	50	3
	30 40	4:40 4:40								7	0	2	5 8	6	9	10 15	10 15	10 15	33 35	62 64	4 5
	Exceptional E											J	0	] 3	10	13	13	15	33	04	J
Max O <sub>2</sub> =14.6%	60	4:40	I							7	3	7	10	14	16	21	21	21	36	66	6
Min O <sub>2</sub> =10.0%	80	4:40	i							7	6	10	13	17	23	23	23	23	36	66	7
	100	4:20							7	2	9	13	16	20	23	23	23	23	36	66	8
	120	4:20							7	4	11	14	19	20	23	23	23	23	36	66	8
270	10	5:20									7	0	0	3	3	4	10	10	17	28	2
	20 30	5:00								7	0	0	3	6	6	8	10	10	29	52	3
	Exceptional E	5:00		<u> </u>						/	0	3	6	6	9	13	13	13	34	62	4
	40	4:40	T						7	0	2	5	8	8	12	16	16	16	35	66	5
Max O <sub>2</sub> =14.2%	60	4:40							7	0	6	8	10	14	19	23	23	23	36	66	6
Min $O_2$ =10.0%	80	4:40							7	3	8	11	14	17	23	23	23	23	36	66	7
	100	4:40	i						7	5	11	13	16	20	23	23	23	23	36	66	8
	120	4:40							7	8	12	16	19	20	23	23	23	23	36	66	8
280	10	5:40									7	0	0	3	3	4	10	10	18	31	2
	20 30	5:20								7	0	0	4	6	7	7	10	10	30	54	3
	Exceptional E	5:00							7	0	1	5	5	9	9	12	12	12	35	64	4
	40	5:00	T						7	0	4	6	8	9	12	17	17	17	35	66	5
Max O <sub>2</sub> =13.7%	60	5:00	1						7	4	6	8	12	15	18	23	23	23	36	66	7
Min O <sub>2</sub> =10.0%	80	4:40						7	0	7	9	11	15	17	23	23	23	23	36	66	8
	100	4:40	i					7	2	9	11	15	17	20	23	23	23	23	36	66	8
	120	4:40						7	4	11	13	16	19	20	23	23	23	23	36	66	8
290	10	5:40								7	0	0	0	4	3	4	10	10	19	33	2
	20	5:20							7	0	0	2	6	6	6	9	10	10	30	56	3
	30 Exceptional E	5:20							7	0	2	5	5	9	9	14	14	14	34	63	5
	40	5:20	ī						7	0	5	7	8	11	13	17	17	17	35	66	5
Max O <sub>2</sub> =13.3%	60	5:00		-				7	0	6	7	9	12	15	20	23	23	23	36	66	7
Min $O_2$ =10.0%	80	5:00						7	2	8	10	12	16	19	23	23	23	23	36	66	8
	100	5:00						7	5	10	12	15	19	20	23	23	23	23	36	66	8
	120	5:00						7	8	11	16	17	19	20	23	23	23	23	36	66	8

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	on time	es (mir					•	( <b>fsw</b> )		et Oo st	on				
	Bottom	Time to	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	Time (min.)	First Stop (min:sec)			1		BOTTO	MIX			1			I	 50%	6 O <sub>2</sub>		ļ.	100	% O <sub>2</sub>	
	10	6:00	<del>                                     </del>							7	0	0	0	4	3	4	10	10	19	33	2
300	20	5:40	i						7	0	0	2	6	6	6	9	10	10	30	56	3
	30	5:40	i						7	0	2	5	5	9	9	14	14	14	34	63	5
	Exceptional	Exposure																			
	40	5:40							7	0	5	7	8	11	13	17	17	17	35	66	6
Max O <sub>2</sub> =12.9%	60	5:20						7	0	6	7	9	12	15	20	23	23	23	36	66	7
Min O <sub>2</sub> =10.0%	80	5:20						7	2	8	10	12	16	19	23	23	23	23	36	66	8
	100	5:20						7	5	10	12	15	19	20	23	23	23	23	36	66	8
	120	5:20						7	8	11	16	17	19	20	23	23	23	23	36	66	8
040	Exceptional	Exposure																			
310	10	6:00							7	0	0	0	3	3	3	7	10	10	21	36	2
0 - 0	20	5:40	i –				İ	7	0	0	2	4	5	6	7	10	10	10	31	57	4
	30	5:40	i –					7	0	2	4	5	7	8	11	15	15	15	35	66	5
	40	5:20					7	0	1	4	6	7	8	12	15	19	19	19	36	66	7
Max O <sub>2</sub> =12.5%	60	5:20					7	0	5	6	9	11	13	17	20	23	23	23	36	66	8
Min O <sub>2</sub> =10.0%	80	5:20					7	3	7	9	11	13	17	20	23	23	23	23	36	66	8
	100	5:20					7	5	9	11	13	17	19	20	23	23	23	23	36	66	8
	120	5:20					7	7	12	13	16	17	19	20	23	23	23	23	36	66	8
	Exceptional	Evnosure																			
320	10	6:20	Г						7	0	0	0	4	3	3	7	10	10	21	38	2
<b></b>	20	6:00						7	0	0	3	5	5	6	8	10	10	10	32	59	4
	30	5:40	<del>i                                    </del>				7	0	0	4	4	6	7	9	11	17	17	17	35	66	5
	40	5:40	i –				7	0	4	4	6	7	9	12	16	20	20	20	36	66	6
Max $O_2$ =12.2%	60	5:20	1			7	0	2	6	8	9	11	14	17	23	23	23	23	36	66	8
Min O <sub>2</sub> =10.0%	80	5:20				7	0	6	8	8	13	14	19	20	23	23	23	23	36	66	8
	100	5:20				7	2	7	10	13	16	17	19	20	23	23	23	23	36	66	8
	120	5:20				7	4	9	12	13	16	17	19	20	23	23	23	23	36	66	8
	Exceptional	Evnosuro																			
330	10	6:20	T	1	Ι	1	1	7	0	0	0	2	3	3	4	7	10	10	22	40	2
	20	6:00					7	0	0	2	3	4	6	5	10	10	10	10	33	60	4
	30	6:00					7	0	1	4	5	6	8	8	13	17	17	17	35	66	6
Max O <sub>2</sub> =11.8%	40	5:40				7	0	1	4	5	7	7	10	12	17	22	22	22	36	66	7
Min O <sub>2</sub> =10.0%	60	5:40	1			7	0	5	6	8	9	11	15	20	23	23	23	23	36	66	8
	80	5:40	ì			7	2	7	8	10	13	15	19	20	23	23	23	23	36	66	8
	100	5:40				7	5	9	9	13	16	17	19	20	23	23	23	23	36	66	8
	120	5:20	1		7	1	7	10	13	15	16	17	19	20	23	23	23	23	36	66	8

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	op time					on St				t O <sub>2</sub> st	ор				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)					вотто	OM MIX							50%	6 O <sub>2</sub>			100	% O <sub>2</sub>	
240	Exceptional I	Exposure																			
340	10	6:40						7	0	0	0	3	3	3	4	7	10	10	23	41	3
	20	6:20					7	0	0	2	4	5	7	8	9	10	10	10	33	60	5
	30	6:00				7	0	0	3	5	5	6	8	9	13	18	18	18	35	66	6
	40	6:00				7	0	2	4	6	7	8	10	13	16	22	22	22	36	66	7
Max $O_2$ =11.5%	60	5:40			7	0	3	5	6	9	10	13	16	18	21	23	23	23	36	66	8
Min O <sub>2</sub> =10.0%	80	5:40			7	0	7	7	8	11	13	15	19	20	23	23	23	23	36	66	8
	100	5:40			7	2	8	8	12	13	16	17	19	20	23	23	23	23	36	66	8
	120	5:40			7	4	9	11	13	15	16	17	19	20	23	23	23	23	36	66	8
250	Exceptional	Exposure																			
<b>350</b>	10	6:40					7	0	0	0	2	2	3	3	5	7	10	10	24	43	3
	20	6:20				7	0	0	0	4	4	5	5	7	9	13	13	13	33	63	5
	30	6:20				7	0	1	4	4	5	7	8	11	13	18	18	18	36	66	6
	40	6:00			7	0	1	3	5	6	7	8	11	14	17	23	23	23	36	66	7
Max O <sub>2</sub> =11.2%	60	6:00			7	0	5	5	8	8	11	12	16	19	23	23	23	23	36	66	8
Min O <sub>2</sub> =10.0%	80	6:00			7	2	7	7	10	11	13	17	19	20	23	23	23	23	36	66	8
	100	5:40		7	0	6	8	9	11	15	16	17	19	20	23	23	23	23	36	66	8
	120	5:40		7	1	7	9	12	14	15	16	17	19	20	23	23	23	23	36	66	8
	Exceptional	Exposure																			
360	10	7:00					7	0	0	0	2	2	3	3	7	7	10	10	25	44	3
	20	6:40				7	0	0	2	3	4	5	5	8	10	13	13	13	34	63	5
	30	6:20			7	0	0	3	3	5	6	7	8	11	13	19	19	19	36	66	7
	40	6:20			7	0	2	4	5	7	7	9	10	14	20	23	23	23	36	66	8
Max O <sub>2</sub> =10.9%	60	6:20			7	2	5	6	7	9	11	14	16	19	23	23	23	23	36	66	8
Min $O_2 = 10.0\%$	80	6:00		7	0	6	6	8	11	12	14	16	19	20	23	23	23	23	36	66	8
	100	6:00		7	2	7	8	11	13	13	16	17	19	20	23	23	23	23	36	66	8
	120	6:00		7	4	8	10	12	14	15	16	17	19	20	23	23	23	23	36	66	8

U.S. Navy Diving Manual — Volume 3

**Table 12-4.** Surface-Supplied Helium-Oxygen Decompression Table (Continued). (DESCENT RATE 75 FPM—ASCENT RATE 30 FPM)

						St	on time		Deco						and firs	t Oo st	on				
	Bottom Time	Time to First Stop	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Chamber O <sub>2</sub> Periods
Depth (fsw)	(min.)	(min:sec)					воттс	M MIX							50%	6 O <sub>2</sub>			1009	% O <sub>2</sub>	
270	Exceptional E	xposure																			
370	10	7:00				7	0	0	0	0	3	3	3	3	7	7	10	10	25	46	3
	20	6:40			7	0	0	0	3	4	4	5	5	8	10	13	13	13	34	63	5
	30	6:20		7	0	0	2	3	4	4	7	7	8	11	16	19	19	19	36	66	7
	40	6:20		7	0	0	4	4	5	6	8	10	11	14	20	23	23	23	36	66	8
Max O <sub>2</sub> =10.6%	60	6:20		7	0	4	5	7	8	9	11	13	17	20	23	23	23	23	36	66	8
Min O <sub>2</sub> =10.0%	80	6:00	7	0	3	6	7	9	10	12	15	17	19	20	23	23	23	23	36	66	8
	100	6:00	7	0	6	7	9	10	14	15	16	17	19	20	23	23	23	23	36	66	8
	120	6:00	7	1	7	9	11	13	14	15	16	17	19	20	23	23	23	23	36	66	8
380	Exceptional E																				
300	10	7:20				7	0	0	0	0	3	3	3	3	7	7	10	10	25	46	3
	20	7:00			7	0	0	0	3	4	4	5	5	8	10	13	13	13	34	63	6
	30	6:40		7	0	0	2	3	4	4	7	7	8	11	16	19	19	19	36	66	7
	40	6:40		7	0	0	4	4	5	6	8	10	11	14	20	23	23	23	36	66	8
Max $O_2$ =10.4%	60	6:40		7	0	4	5	7	8	9	11	13	17	20	23	23	23	23	36	66	8
Min $O_2$ =10.0%	80	6:20	7	0	3	6	7	9	10	12	15	17	19	20	23	23	23	23	36	66	8
	100	6:20	7	0	6	7	9	10	14	15	16	17	19	20	23	23	23	23	36	66	8
	120	6:20	7	1	7	9	11	13	14	15	16	17	19	20	23	23	23	23	36	66	8

## 1.3 ata $ppO_2 N_2O_2$ Tables

# No Decompression Limits and Repetitive Group Designators for 1.3 ata ${\rm ppO_2}~{\rm N_2O_2}$ Dives

Depth							R	epetiti	ve Gro	up De	signate	or					
(fsw)	No-Stop Limit	Α	В	С	D	Е	F	G	Н	ı	J	K	L	M	N	0	Z
10	Unlimited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Unlimited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Unlimited	153	420	*													
25	Unlimited	51	87	133	196	296	557	*									
30	Unlimited	31	50	72	98	128	164	210	273	372	629	*					
35	Unlimited	22	35	50	66	84	103	126	151	181	217	263	326	425	680	*	
40	Unlimited	89	168	318	*												
50	Unlimited	27	44	63	84	108	136	169	210	265	344	496	*				
60	297	16	25	36	46	58	70	83	97	113	130	149	170	194	222	255	297
70	130	11	18	25	32	39	47	55	64	73	83	93	103	115	127	130	
80	70	9	14	19	24	30	36	42	48	54	61	68	70				
90	50	7	11	15	20	24	29	33	38	43	48	50					
100	39	6	9	13	16	20	24	28	32	36	39						
110	32	5	8	11	14	17	20	24	27	30	32						
120	27	4	7	9	12	15	18	20	23	26	27						
130	23	3	6	8	11	13	16	18	21	23							
140	21	3	5	7	9	12	14	16	18	21							
150	17	3	5	6	8	10	12	15	17								
Exception	onal Exposure																
160	15	3	4	6	8	9	11	13	15								
170	13	4	5	7	9	10	12	13									
180	12		3	5	6	8	9	11	12								
190	10			4	6	7	9	10									

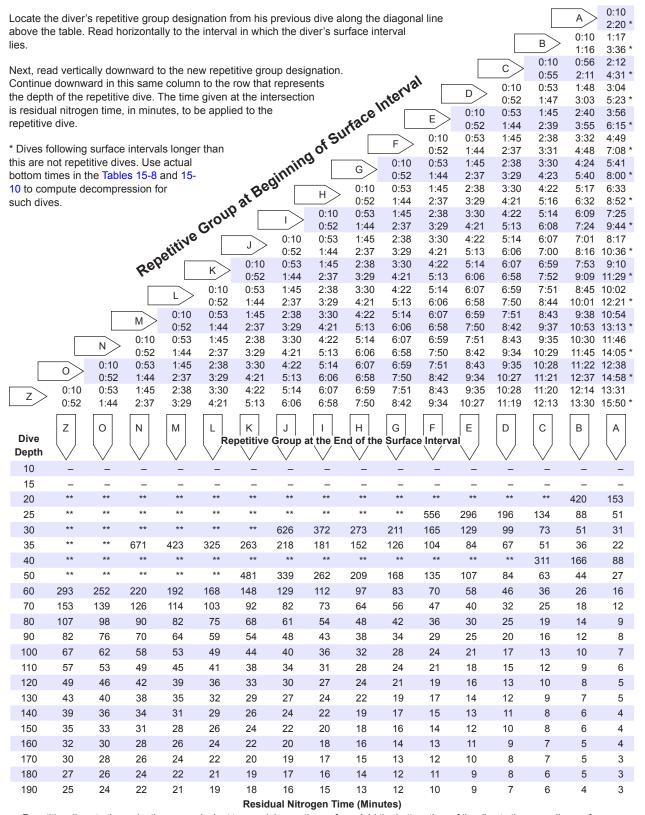
<sup>-</sup> Diver does not acquire a repetitive group designator during dives to these depths.

**Table 15-8.** No Decompression Limits and Repetitive Group Designators for 1.3 at app $O_2 N_2 O_2$  Dives.

<sup>\*</sup> Highest repetitive group that can be achieved at this depth regardless of bottom time.

#### Residual Nitrogen Timetable for 1.3 ata ppO, N,O, Dives

**Table 15-9.** Residual Nitrogen Timetable for 1.3 ata ppO<sub>2</sub> N<sub>2</sub>O<sub>2</sub> Dives.



Repetitive dives to these depths are equivalent to remaining on the surface. Add the bottom time of the dive to the preceding surface interval. Use the Surface Interval Credit Table (SICT) to determine the repetitive group at the end of the dive.

<sup>\*\*</sup> Residual Nitrogen Time cannot be determined using this table. See paragraph 9-9.1 subparagraph 8 for guidance. Substitute the \*\* depths in this table for those in the instructions.

#### Repetitive Dive Worksheet for 1.3 at a ${\rm ppO_2}\ {\rm N_2O_2}$ Dives

DERET	
	TIVE DIVE WORKSHEET FOR 3 ata ppO <sub>2</sub> N <sub>2</sub> O <sub>2</sub> DIVES
	minutes feet
	repetitive group designator from Table 15-8 if the dive was a no-decompression dive, or Table 15-10 if the dive was a decompression dive.
Part 2. Surface Interval:	
and move horizontally to the colur	9 at the row for the repetitive group designator from Part 1 mn in which the actual or planned surface interval time lies. signator from the bottom of this column.
	hours minutes on the surface
	final repetitive group from Table 15-9
Part 3. Equivalent Single Dive Time f	or the Repetitive Dive:
repetitive dive. Move horizontally	15-9 at the row for the maximum depth of the planned to the column of the final repetitive group designator from En Time (RNT). Add this RNT to the planned bottom time for quivalent single dive time.
minutes: RN	IT
+ minutes: pla	nnned bottom time
= minutes: eq	uivalent single dive time
Part 4. Decompression Schedule for	the Repetitive Dive:
the column with bottom time equa read the surfacing repetitive group equivalent single dive time exceed and equivalent single dive time in	e planned repetitive dive in Table 15-8. Move horizontally to all to or just greater than the equivalent single dive time and of for the repetitive dive from the top of the column. If the dist the no-decompression limit, locate the row for the depth Table 15-10. Read the required decompression stops and a columns to the right along this row.
minutes: equi	ivalent single dive time from Part 3
feet: depth of	the repetitive dive.
Schedule (de	pth/bottom time) from Table 15-8 or Table 15-10.
Ensure RNT Exception Rule does not a Verify allowable repet from Table 15-1.	apply.

**Figure 15-8.** Repetitive Dive Worksheet for 1.3 ata  $ppO_2 N_2O_2$ .

**Table 15-10.** 1.3 ata  $ppO_2 N_2O_2$  Decompression Tables. (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to	DE Stop times (n	COMPRE				t stop	Total Ascent Time	Repet
(min)	(M:S)	80 70	60	50	40	30	20	(M:S)	Group
60 FSW									
297	2:00						0	2:00	Z
300	1:20						1	3:00	Z
310	1:20						2	4:00	Z
320	1:20						3	5:00	Z
330	1:20						4	6:00	Z
Exceptional Ex	posure								
340	1:20						5	7:00	
350	1:20						6	8:00	
360	1:20						7	9:00	
370	1:20						8	10:00	
380	1:20						9	11:00	
390	1:20						10	12:00	
70 FSW									
130	2:20						0	2:20	0
140	1:40						3	5:20	0
150	1:40						6	8:20	0
160	1:40						8	10:20	Z
170	1:40						10	12:20	Z
180	1:40						12	14:20	Z
190	1:40						14	16:20	Z
200	1:40						16	18:20	Z
210	1:40						19	21:20	Z
220	1:40						22	24:20	Z
230	1:40						24	26:20	Z
Exceptional Ex	-								
240	1:40						26	28:20	
250	1:40						29	31:20	
260	1:40						31	33:20	
270	1:40						33	35:20	
280	1:40						35	37:20	
290	1:40						37	39:20	
300	1:40						38	40:20	
310	1:40						40	42:20	
320	1:40						42	44:20	
340	1:40						47	49:20	
350	1:40						49	51:20	

**Table 15-10.** 1.3 ata  $ppO_2 N_2O_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to	Stop				TOPS (fs		stop	Total Ascent	Donot.
(min)	(M:S)	80	70	60	50	40	30	20	(M:S)	Repet Group
80 FSW	!	ı							ı	
70	2:40							0	2:40	L
75	2:00							2	4:40	L
80	2:00							4	6:40	M
85	2:00							5	7:40	М
90	2:00							6	8:40	N
95	2:00							7	9:40	Ν
100	2:00							9	11:40	N
110	2:00							12	14:40	0
120	2:00							16	18:40	0
130	2:00							20	22:40	Z
140	2:00							24	26:40	Z
150	2:00							27	29:40	Z
160	2:00							30	32:40	Z
170	2:00							34	36:40	Z
Exceptional Ex	posure									
180	2:00							39	41:40	
190	2:00							43	45:40	
200	2:00							47	49:40	
210	2:00							50	52:40	
220	2:00							54	56:40	
230	2:00							57	59:40	
240	2:00							60	62:40	
250	2:00							63	65:40	
260	2:00							67	69:40	
270	2:00							70	72:40	
280	2:00							74	76:40	
290	2:00							77	79:40	
300	2:00							81	83:40	
310	2:00							84	86:40	
320	2:00							87	89:40	

**Table 15-10.** 1.3 at appO $_2$   $N_2$ O $_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Dette us Times	Time to	Stop tii			SSION S		w) ept first :	stop	Total Ascent	Damet
Bottom Time (min)	First Stop (M:S)	80	70	60	50	40	30	20	Time (M:S)	Repet Group
90 FSW										
50	3:00							0	3:00	K
55	2:20							3	6:00	K
60	2:20							6	9:00	L
65	2:20							8	11:00	L
70	2:20							11	14:00	M
75	2:20							13	16:00	М
80	2:20							14	17:00	Ν
85	2:20							16	19:00	Ν
90	2:20							18	21:00	0
95	2:20							21	24:00	0
100	2:20							24	27:00	0
110	2:20							30	33:00	0
120	2:20							35	38:00	Z
130	2:20							40	43:00	Z
Exceptional Ex	posure									
140	2:20	1						45	48:00	
150	2:20							51	54:00	
160	2:20							57	60:00	
170	2:00						1	62	65:40	
180	2:00						2	66	70:40	
190	2:00						2	71	75:40	
100 FSW										
39	3:20							0	3:20	J
40	2:40							1	4:20	J
45	2:40							5	8:20	K
50	2:40							9	12:20	L
55	2:40							12	15:20	L
60	2:40							15	18:20	М
65	2:40							18	21:20	М
70	2:40							21	24:20	N
75	2:40							23	26:20	N
80	2:40							26	29:20	0
85	2:40							30	33:20	0
90	2:40							34	37:20	0
95	2:20						1	37	41:00	0
100	2:20						3	39	45:00	0
Exceptional Ex										
110	2:20						6	43	52:00	
120	2:20						8	47	58:00	

**Table 15-10.** 1.3 ata  $ppO_2 N_2O_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

		<u> </u>							7	
5 T	Time to	Stop				TOPS (fs		stop	Total Ascent	
Bottom Time (min)	First Stop (M:S)	80	70	60	50	40	30	20	Time (M:S)	Repet Group
110 FSW	` ,								, ,	·
32	3:40							0	3:40	J
35	3:00							3	6:40	J
40	3:00							8	11:40	K
45	3:00							13	16:40	L
50	3:00							17	20:40	L
55	3:00							21	24:40	М
60	3:00							25	28:40	M
65	3:00							28	31:40	N
70	2:40						1	30	34:20	0
75	2:40						4	32	39:20	0
80	2:40						7	34	44:20	0
Exceptional Ex	posure									
85	2:40						9	37	49:20	
90	2:40						11	39	53:20	
95	2:40						13	42	58:20	
100	2:40						15	44	62:20	
110	2:20					3	15	49	70:00	
120	2:20					6	15	56	80:00	
120 FSW										
27	4:00							0	4:00	J
30	3:20							4	8:00	J
35	3:20							10	14:00	K
40	3:20							16	20:00	L
45	3:20							21	25:00	L
50	3:20							26	30:00	M
55	3:20							30	34:00	M
60	3:00						4	31	38:40	N
65	3:00						8	30	41:40	0
Exceptional Ex	posure									
70	3:00						12	32	47:40	
75	3:00						15	35	53:40	
80	2:40					3	15	38	59:20	
85	2:40					6	15	41	65:20	
90	2:40					8	15	44	70:20	
95	2:40					10	15	47	75:20	
100	2:40					12	15	51	81:20	

**Table 15-10.** 1.3 ata  $ppO_2 N_2O_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time to		DECOMPRE					Total Ascent	
Bottom Time (min)	First Stop (M:S)	80 70	(min) inclu 60	de travel	time, exc	ept first s 30	stop 20	Time (M:S)	Repet Group
130 FSW	, ,	I							·
23	4:20						0	4:20	1
25	3:40						2	6:20	J
30	3:40						10	14:20	K
35	3:40						17	21:20	K
40	3:40						23	27:20	L
45	3:40						29	33:20	М
50	3:20					4	30	38:00	N
55	3:20					9	30	43:00	N
Exceptional Ex	posure								
60	3:20	,				14	30	48:00	
65	3:00				3	15	33	54:40	
70	3:00				7	15	36	61:40	
75	3:00				11	15	39	68:40	
80	3:00				14	15	42	74:40	
140 FSW									
21	4:40						0	4:40	I
25	4:00						7	11:40	J
30	4:00						16	20:40	K
35	4:00						23	27:40	L
40	3:40					2	29	35:20	L
45	3:40					7	30	41:20	M
Exceptional Ex						·			
50	3:20				1	12	30	47:00	
55	3:20				4	15	30	53:00	
60	3:20				9	15	33	61:00	
65	3:20				13	15	36	68:00	
70	3:00			3	15	15	40	76:40	
75	3:00			7	15	15	44	84:40	
80	3:00			10	15	15	50	93:40	

**Table 15-10.** 1.3 at app $O_2$   $N_2O_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Datta and Time	Time to	Stor				STOPS (fs	,	stop	Total Ascent	Donat
Bottom Time (min)	First Stop (M:S)	80	70	60	50	40	30	20	Time (M:S)	Repet Group
150 FSW	1								ı	
17	5:00							0	5:00	Н
20	4:20							3	8:00	ı
25	4:20							13	18:00	J
30	4:20							22	27:00	K
35	4:00						3	27	34:40	L
40	4:00						8	30	42:40	М
Exceptional Ex	posure									
45	3:40					4	11	30	49:20	
50	3:40					7	15	30	56:20	
55	3:20				2	11	15	33	65:00	
60	3:20				4	14	15	37	74:00	
65	3:20				8	15	15	40	82:00	
70	3:20				13	15	15	46	93:00	
75	3:00			2	15	15	15	52	102:40	
80	3:00			6	15	15	15	59	113:40	
160 FSW										

Exceptional E	xposure								
15	5:20						0	5:20	Н
20	4:40						7	12:20	J
25	4:20					1	17	23:00	K
30	4:20					3	25	33:00	L
35	4:00				1	8	28	41:40	M
40	4:00				5	10	30	49:40	
45	3:40			2	7	14	30	57:20	
50	3:40			5	10	15	33	67:20	
55	3:40			8	14	15	36	77:20	
60	3:20		3	10	15	15	41	88:00	
65	3:20		5	13	15	15	48	100:00	
70	3:20		8	15	15	15	55	112:00	
75	3:20		13	15	15	15	61	123:00	
80	3:00	3	15	15	15	15	68	134:40	

**Table 15-10.** 1.3 ata  $ppO_2 N_2O_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

		(DESCE	-NI RAI	E 60 FP	M—ASC	ENT RA	(IE 30 F	PM)		
Bottom Time	Time to	Stop				STOPS (fs time, exc		stop	Total Ascent Time	Repet
(min)	(M:S)	80	70	60	50	40	30	20	(M:S)	Group
170 FSW										
Exceptional Ex	posure								,	
13	5:40							0	5:40	Н
15	5:00							2	7:40	ı
20	5:00							12	17:40	J
25	4:40						3	20	28:20	K
30	4:20					3	5	26	39:00	L
35	4:00				1	5	8	30	48:40	
40	4:00				4	7	12	30	57:40	
45	4:00				8	8	15	32	67:40	
50	3:40			4	7	13	15	36	79:20	
55	3:40			7	9	15	15	41	91:20	
60	3:20		2	7	14	15	15	48	105:00	
180 FSW										
Exceptional Ex	posure									
12	6:00							0	6:00	Н
15	5:20							4	10:00	ı
20	5:00						2	14	21:40	K
25	4:40					3	3	23	34:20	L
30	4:20				2	4	7	27	45:00	
35	4:00			1	3	8	9	30	55:40	
40	4:00			2	7	8	14	30	65:40	
45	4:00			6	7	11	15	35	78:40	
50	3:40		2	8	8	15	15	40	92:20	
55	3:40		5	8	12	15	15	49	108:20	
60	3:20	1	7	9	15	15	15	57	123:00	
190 FSW										
Exceptional Ex	noouro									
10	<u> </u>							0	6:20	
15	6:20 5:40							6	6:20 12:20	G J
20						1	4	16		K
25	5:00 4:40				2	4	4	24	26:40 39:20	
				2	3					L
30 35	4:20 4:20			4	5	5 8	8 11	29 30	52:00 63:00	
			2							
40	4:00 4:00		2	5	8 7	8	15 15	34	76:40 01:40	
45		4		8		14	15 15	39	91:40	
50	3:40	1	7	8	11	15	15	47	108:20	
55 60	3:40	4	8	8	15 15	15 15	15 15	56	125:20	
611	.3.4(1)	/	/	1.3	16	7.6	7.6	6h	1/11/201	

13

15

15

3:40

60

141:20

## **1.3** ata ppO<sub>2</sub> HeO<sub>2</sub> Tables

# No Decompression Limits and Repetitive Group Designators for 1.3 ata ${\rm ppO_2}$ HeO2 Dives

Depth							R	epetiti	ve Gro	up De	signate	or					
(fsw)	No-Stop Limit	Α	В	С	D	E	F	G	Н		J	K	L	M	N	0	Z
10	Unlimited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Unlimited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Unlimited	129	269	*													
25	Unlimited	45	72	106	146	200	278	425	*								
30	332	27	43	60	78	100	124	152	185	227	281	332					
35	190	19	30	41	54	67	81	97	114	133	154	178	190				
40	Unlimited	122	246	*													
50	325	27	43	59	78	99	123	150	183	223	276	325					
60	134	15	23	32	41	51	61	71	83	95	108	123	134				
70	86	11	16	22	28	34	41	47	54	61	69	77	85	86			
80	63	8	12	17	21	26	30	35	40	45	51	56	62	63			
90	44	6	10	13	17	20	24	28	32	36	40	44					
100	31	5	8	11	14	17	20	23	26	30	31						
110	24	4	7	9	12	14	17	20	22	24							
120	20	4	6	8	10	13	15	17	19	20							
130	17	3	5	7	9	11	13	15	17								
140	15	3	4	6	8	10	12	13	15								
150	13	3	4	6	7	9	10	12	13								
160	12		3	5	6	8	9	11	12								
170	11		3	4	6	7	9	10	11								
180	10		3	4	5	6	8	9	10								
190	9			4	5	6	7	8	9								
200	8				4	5	7	8									

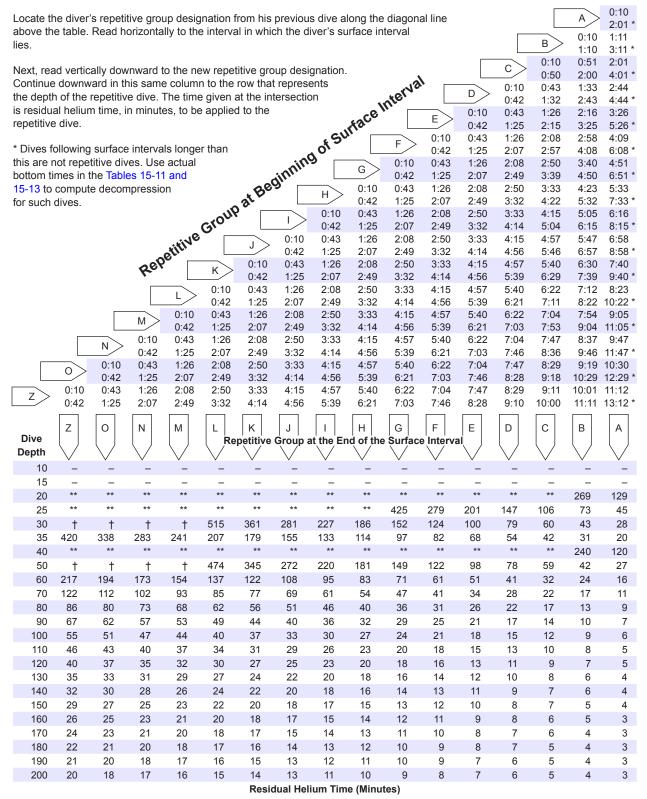
<sup>-</sup> Diver does not acquire a repetitive group designator during dives to these depths.

**Table 15-11.** No Decompression Limits and Repetitive Group Designators for 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Dives.

<sup>\*</sup> Highest repetitive group that can be achieved at this depth regardless of bottom time.

#### Residual Helium Timetable for 1.3 ata ppO, HeO2 Dives

**Table 15-12.** Residual Helium Timetable for 1.3 ata ppO, HeO<sub>2</sub> Dives.



Repetitive dives to these depths are equivalent to remaining on the surface. Add the bottom time of the dive to the preceding surface interval. Use the Surface Interval Credit Table (SICT) to determine the repetitive group at the end of the dive.

<sup>\*\*</sup> Residual Helium Time cannot be determined using this table. See paragraph 9-9.1 subparagraph 8 for guidance. Substitute the \*\* depths in this table for those in the instructions.

<sup>†</sup> Read vertically down to the 35 or 60 fsw repetitive dive depth to obtain the RHT. Decompress on the 35 or 60 fsw table.

#### Repetitive Dive Worksheet for 1.3 ata $ppO_2$ HeO2 Dives

REF	PETITIVE DIVE WORKSHEET FOR  1.3 ata ppO, HeO, DIVES
Double Duraniana Dina	
Part 1. Previous Dive	minutes feet
_	repetitive group designator from Table 15-11 if the dive was a no-decompression dive, or Table 15-13 if the dive was a decompression dive.
Part 2. Surface Interval:	rable to to it the aire was a descripted on aire.
and move horizontally to the	e 15-12 at the row for the repetitive group designator from Part 1 column in which the actual or planned surface interval time lies. p designator from the bottom of this column.
_	hours minutes on the surface
-	final repetitive group from Table 15-12
Part 3. Equivalent Single Dive Ti	me for the Repetitive Dive:
repetitive dive. Move horizon Part 2 to find the Residual He	Table 15-12 at the row for the maximum depth of the planned tally to the column of the final repetitive group designator from the lium Time (RHT). Add this RHT to the planned bottom time for the equivalent single dive time.
minutes	s: RHT
+ minutes	s: planned bottom time
= minutes	s: equivalent single dive time
Part 4. Decompression Schedule	e for the Repetitive Dive:
to the column with bottom tim and read the surfacing repeti equivalent single dive time ex and equivalent single dive tin	of the planned repetitive dive in Table 15-11. Move horizontally ne equal to or just greater than the equivalent single dive time tive group for the repetitive dive from the top of the column. If the exceeds the no-decompression limit, locate the row for the depth ne in Table 15-13. Read the required decompression stops and m the columns to the right along this row.
minutes:	equivalent single dive time from Part 3
feet: dep	oth of the repetitive dive.
Schedule	e (depth/bottom time) from Table 15-11 or Table 15-13.
Ensure RHT Exception Rule does Verify allowable repet from Table 1	

**Figure 15-9.** Repetitive Dive Worksheet for 1.3 ata  $ppO_2$  HeO<sub>2</sub> Dives.

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables. (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Dottom	Time				C4a-	. dima -		RESSI				. firet	oton				Total	
Time (min)	to First Stop (M:S)	170	160	150				ude tr 100	avei i 90	ime, 6	70	60	50 50	40	30	20	Ascent Time (M:S)	Repe Grou
30 FS	W																	
332	1:00															0	1:00	
340	0:20															4	5:00	
360	0:20															13	14:00	
420	0:20															34	35:00	
480	0:20															48	49:00	
540	0:20															59	60:00	
600	0:20															70	71:00	
660	0:20															87	88:00	
720	0:20															101	102:00	
35 FS	W																	
190	1:10															0	1:10	L
200	0:30															12	13:10	L
210	0:30															23	24:10	
220	0:30															33	34:10	
230	0:30															42	43:10	
240	0:30															50	51:10	
270	0:30															71	72:10	
	0:30															89	90:10	
300	0:30															103		
330 360	0:30															115	116:10	
390	0:30															126	127:10	
	0:30																	
420																	146:10	
450	0:30																163:10	
480	0:30															1//	178:10	
50 FS																		
325	1:40															0	1:40	K
330	1:00															1	2:40	K
340	1:00															2	3:40	K
350	1:00															3	4:40	K
360	1:00															5	6:40	K
420	1:00															11	12:40	
480	1:00															15	16:40	
540	1:00															18	19:40	
600	1:00															21	22:40	
660	1:00															25	26:40	
	1:00															29	30:40	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time						DEC	OMPE	RESSI	ON ST	OPS	(fsw)						Total	
Bottom	to First				Stop	time			ude tr				t first	stop				Ascent	
Time (min)	Stop (M:S)	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Time (M:S)	Repet Group
60 FS	w																		
134	2:00																0	2:00	L
140	1:20																3	5:00	L
150	1:20																8	10:00	L
160	1:20																12	14:00	L
170	1:20																16	18:00	L
180	1:20																20	22:00	
190	1:20																24	26:00	
200	1:20																27	29:00	
210	1:20																31	33:00	
220	1:20																34	36:00	
230	1:20																37	39:00	
240	1:20																40	42:00	
250	1:20																42	44:00	
260	1:20																45	47:00	
270	1:20																47	49:00	
280	1:20																49	51:00	
290	1:20																51	53:00	
300	1:20																53	55:00	
310	1:20																55	57:00	
320	1:20																57	59:00	
330	1:20																59	61:00	
340	1:20																61	63:00	
350	1:20																64	66:00	
360	1:20																66	68:00	
70 FS	Λ./																		
																	0	2,20	N.4
86 90	2:20																0	2:20	M M
95	1:40 1:40																8	5:20 10:20	IVI
100	1:40																12	14:20	
110	1:40																19	21:20	
120	1:40																26	28:20	
130	1:40																33	35:20	
140	1:40																39	41:20	
150	1:40																45	47:20	
160	1:40																50	52:20	
170	1:40																55	57:20	
180	1:40																60	62:20	
190	1:40																64	66:20	
200	1:40																68	70:20	
210	1:40																72	74:20	
220	1:40																76	78:20	

**Table 15-13.** 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time				Stor	time		RESSI ude tr			t firet	eton				Total Ascent	
Time (min)	Stop (M:S)	170	160	150			·	100	80	70	60	50 50	40	30	20	Time (M:S)	Repet Group
80 FS		I														1 ` ′	
63	2:40														0	2:40	М
65	2:00														2	4:40	М
70	2:00														8	10:40	
75	2:00														14	16:40	
80	2:00														19	21:40	
85	2:00														24	26:40	
90	2:00														29	31:40	
95	2:00														34	36:40	
100	2:00														39	41:40	
110	2:00														48	50:40	
120	2:00														56	58:40	
130	2:00														63	65:40	
140	2:00														70	72:40	
150	2:00														76	78:40	
160	2:00														82	84:40	
170	2:00														88	90:40	
180	2:00														93	95:40	
190	2:00														98	100:40	
90 FS	W																
44	3:00														0	3:00	K
45	2:20														1	4:00	K
50	2:20														2	5:00	L
55	2:20														7	10:00	M
60	2:20														15	18:00	
65	2:20														22	25:00	
70	2:20														29	32:00	
75	2:20														35	38:00	
80	2:20														41	44:00	
85	2:20														47	50:00	
90	2:20														53	56:00	
95	2:20														58	61:00	
100	2:20														63	66:00	
110	2:20														73	76:00	
120	2:20														82	85:00	
130	2:20														90	93:00	
140	2:20														97		
150	2:20														105	108:00	
160	2:20														112	115:00	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

D - 44	Time				•	41		RESSI					_4_				Total	
Time (min)	to First Stop (M:S)	170	160	150				ude tr 100	avel t	ime, e 80	except	t first 60	stop 50	40	30	20	Ascent Time (M:S)	Repet
100 F																	( - /	
31	3:20															0	3:20	J
35	2:40															2	5:20	K
40	2:40															4	7:20	L
45	2:40															6	9:20	М
50	2:40															16	19:20	
55	2:40															24	27:20	
60	2:40															33	36:20	
65	2:40															41	44:20	
70	2:40															48	51:20	
75	2:40															55	58:20	
80	2:40															62	65:20	
85	2:40															68	71:20	
90	2:40															74	77:20	
95	2:40															80	83:20	
100	2:40															85	88:20	
110	2:40															96	99:20	
120	2:40															105	108:20	
130	2:20														1	114	118:00	
140	2:20														1	124	128:00	
1 <b>10 F</b> \$	<b>SW</b> 3:40															0	3:40	I
25	3:00															1	4:40	i I
30	3:00															4	7:40	'
35	3:00																	- 1
																7		J
40	.3"()()															7 10	10:40	L
40 45	3:00															10	10:40 13:40	
45	3:00															10 21	10:40 13:40 24:40	L
45 50	3:00 3:00															10 21 31	10:40 13:40 24:40 34:40	L
45 50 55	3:00 3:00 3:00														1	10 21 31 40	10:40 13:40 24:40 34:40 43:40	L
45 50 55 60	3:00 3:00 3:00 2:40														1 2	10 21 31 40 49	10:40 13:40 24:40 34:40 43:40 53:20	L
45 50 55 60 65	3:00 3:00 3:00 2:40 2:40														2	10 21 31 40 49 57	10:40 13:40 24:40 34:40 43:40 53:20 62:20	L
45 50 55 60 65 70	3:00 3:00 3:00 2:40 2:40 2:40														2	10 21 31 40 49 57 64	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20	L
45 50 55 60 65 70 75	3:00 3:00 3:00 2:40 2:40 2:40 2:40														2 3 4	10 21 31 40 49 57 64 71	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20	L
45 50 55 60 65 70 75 80	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40														2 3 4 5	10 21 31 40 49 57 64 71	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20	L
45 50 55 60 65 70 75	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40														2 3 4	10 21 31 40 49 57 64 71	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20 92:20	L
45 50 55 60 65 70 75 80 85 90	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40														2 3 4 5 5	10 21 31 40 49 57 64 71 77 84	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20 92:20 98:20	L
45 50 55 60 65 70 75 80 85	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40														2 3 4 5 5	10 21 31 40 49 57 64 71 77 84 89	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20 92:20 98:20 104:20	L
45 50 55 60 65 70 75 80 85 90	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40 2:40														2 3 4 5 5 6 6	10 21 31 40 49 57 64 71 77 84 89 95	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20 92:20 98:20	L
45 50 55 60 65 70 75 80 85 90 95 100	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40 2:40 2	(POSL	JRE -												2 3 4 5 5 6 6	10 21 31 40 49 57 64 71 77 84 89 95	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 92:20 98:20 104:20 110:20	L
45 50 55 60 65 70 75 80 85 90 95 100	3:00 3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40 2:40 2	(POSL	JRE -												2 3 4 5 5 6 6 6 7	10 21 31 40 49 57 64 71 77 84 89 95 101 112	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 92:20 98:20 104:20 110:20	L
45 50 55 60 65 70 75 80 85 90 95 100 110 EXCEPT	3:00 3:00 2:40 2:40 2:40 2:40 2:40 2:40 2:40 2	(POSL	JRE -												2 3 4 5 5 6 6 6 7	10 21 31 40 49 57 64 71 77 84 89 95 101 112	10:40 13:40 24:40 34:40 43:40 53:20 62:20 70:20 78:20 85:20 92:20 98:20 104:20 110:20	L

**Table 15-13.** 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Detter	Time				Ct	Almes		RESSI				. finat					Total	
Time (min)	Stop (M:S)		160	150				ude tr 100	avei t	ıте, є 80	70	60	50 50	40	30	20	Ascent Time (M:S)	Repet Group
120 F	SW	'															1	
20	4:00															0	4:00	I
25	3:20															4	8:00	J
30	3:20															8	12:00	K
35	3:20															12	16:00	М
40	3:20															23	27:00	
45	3:00														2	34	39:40	
50	3:00														4	43	50:40	
55	3:00														6	52	61:40	
60	3:00														7	60	70:40	
65	2:40													2	7	68	80:20	
70	2:40													3	7	76	89:20	
75	2:40													3	8	83	97:20	
80	2:40													4	7	91	105:20	
85	2:40													5	7	97	112:20	
90	2:40													5	8	103	119:20	
95	2:40													6	7		126:20	
EXCEPT		XPOS	URE -				 											
100	2:40													6	7	117	133:20	
110	2:40													7	7		148:20	
120	2:40													7	7	145	162:20	
130 F																0	4.00	
17	4:20															0	4:20	Н
20	3:40															3	7:20	
25	3:40 3:40															13	12:20	K
30															0		17:20	L
35	3:20 3:20														2 5	21 32	27:00	L
40 45	3:00													1	7	43	41:00 54:40	L
50	3:00													3	7	53	66:40	L
55	3:00													5	7	63	78:40	
60	3:00													6	8	71	88:40	
65	2:40												1	7	7		99:20	
70	2:40												2	7	7	89	108:20	
75	2:40												3	7	7		117:20	
80	2:40												3	8	7		125:20	
85	2:40												4	8			133:20	
EXCEPT		XPOS	URF -											0		111	100.20	
90	2:40	XI 00	OIL -										 5	7	7	110	141:20	
95	2:40												5	8			150:20	
100	2:40												6	7			159:20	
110	2:40												6	8			176:20	
120	2:40												7	7			194:20	
120	∠.+∪												,	,	10	108	137.20	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time								RESSI									Total	
Bottom Time (min)	to First Stop (M:S)		160	150	Stop				ude tr	avel t	ime, 6 80	70	first	stop 50	40	30	20	Ascent Time (M:S)	Repet Group
140 F	` ,	170	100	150	140	130	120	110	100	30	00	70	00	30	40	30	20	(101.3)	Group
15	4:40																0	4:40	Н
20	4:00																7	11:40	J
25	4:00																12	16:40	K
30	3:40															3	16	23:20	M
35	3:40															7	29	40:20	141
40	3:20														3	7	42	56:00	
45	3:20														6	7	53	70:00	
50	3:00													1	8	7	64	83:40	
55	3:00													3	8	7	74	95:40	
60	3:00													5	8	7	84	107:40	
65	3:00													7	7	7	93	117:40	
70	2:40												1	7	8	7	101	127:20	
75	2:40												2	7	8	7	110	137:20	
EXCEPT	ONAL EX	XPOSI	URE -																
80	2:40												3	7	8	7	118	146:20	
85	2:40												4	7	7	8	127	156:20	
90	2:40												4	8	7	7	137	166:20	
95	2:40												5	7	7	8	146	176:20	
100	2:40												5	8	7	8	155	186:20	
150 F	SW																		
13	5:00																0	5:00	Н
15	4:20																3	8:00	Н
20	4:20																10	15:00	J
25	4:00															2	14	20:40	L
30	4:00															7	24	35:40	L
35	3:40														4	8	37	53:20	L
40	3:20													1	7	8	50	70:00	
45	3:20													4	8	7	63	86:00	
50	3:20													7	7	8	74	100:00	
55	3:00												2	8	7	7	86	113:40	
60	3:00												4	8	7	7	96	125:40	
65	3:00												6	7	7	8	105	136:40	
70	3:00												7	7	8	7	114	146:40	
EXCEPT	ONAL EX	XPOS	URE -																
75	2:40											1	8	7	7	8	124	158:20	
80	2:40											2	8	7	7	8	135	170:20	
85	2:40											3	7	8	7	7	146	181:20	
90	2:40											4	7	7	8	9	155	193:20	

**Table 15-13.** 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First			,	Stor	time:			RESSI			` '	first	stop			,	Total Ascent	
Time (min)	Stop (M:S)	170	160	150	·		•	•		90	80	70	60	50	40	30	20	Time (M:S)	Repet Group
160 FS	SW																	,	
12	5:20																0	5:20	Н
15	4:40																5	10:20	I
20	4:40																13	18:20	K
25	4:20															6	16	27:00	М
30	4:00														4	8	31	47:40	
35	3:40													2	7	8	46	67:20	
40	3:40													6	8	7	60	85:20	
45	3:20												3	7	7	8	73	102:00	
50	3:20												6	7	7	8	85	117:00	
55	3:00											1	7	8	7	7	97	130:40	
60	3:00											3	7	8	7	8	107	143:40	
EXCEPT	IONAL EX	KPOS	URE -																
65	3:00											5	7	8	7	7	118	155:40	
70	3:00											6	8	7	7	8	130	169:40	
75	3:00											8	7	7	8	7	142	182:40	
80	2:40										2	7	7	8	7	7	154	195:20	
85	2:40										2	8	7	8	7	16	158	209:20	
90	2:40										3	8	7	7	8	25	161	222:20	
170 F	SW																		
11	5:40																0	5:40	Н
15	5:00																8	13:40	1
20	4:40															2	15	22:20	K
25	4:20														2	8	22	37:00	L
30	4:00													2	7	7	39	59:40	L
35	4:00													7	7	8	55	81:40	
40	3:40												4	8	7	7	70	100:20	
45	3:20											1	7	8	7	7	84	118:00	
50	3:20											4	7	8	7	8		134:00	
55	3:20											7	7	7	8	7	108	148:00	
EXCEPT	IONAL EX	KPOS	URE -																
60	3:00										2	7	8	7	7	8	120	162:40	
65	3:00										4	7	8	7	7	8	134	178:40	
70	3:00										5	8	7	8	7			193:40	
75	3:00										7	7	8	7	7			208:40	
80	2:40									1	7	8	7	7	8			223:20	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Time Bottom to First Time Stop (min) (M:S) 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 180 FSW	Total
` ' ` '	Ascent Time Repe
100 ESVV	(M:S) Grou
10 6:00 0	6:00 H
15 5:20 11	17:00 J
20 5:00 6 14	25:40 L
25 4:40 6 8 29	48:20 L
30 4:20 6 7 8 47	73:00
35 4:00 4 8 7 8 64	95:40
40 3:40 2 8 7 7 8 80	116:20
45 3:40 6 8 7 7 8 94	134:20
50 3:20 3 7 7 8 7 7 108	151:00
EXCEPTIONAL EXPOSURE	
55 3:20 5 8 7 8 7 7 121	167:00
60 3:00 1 7 8 7 7 8 7 136	184:40
65 3:00 3 7 8 7 7 8 7 151	201:40
70 3:00 5 7 7 8 7 7 16 158	218:40
190 FSW	
9 6:20 0	6:20 H
10 5:40 2	8:20 H
15 5:40 14	20:20 J
20 4:40 1 1 8 16	31:20 M
25 3:20 1 0 0 0 4 7 7 38	61:00
	87:40
30 3:00 1 0 0 2 2 7 7 8 57	111:20
30     3:00     1     0     0     2     2     7     7     8     57       35     2:40     1     0     0     2     0     8     7     8     7     75	
	133:00
35 2:40 1 0 0 2 0 8 7 8 7 75	133:00 151:00
35       2:40       1       0       0       2       0       8       7       8       7       75         40       2:20       1       0       0       0       2       6       8       7       7       8       91	
35       2:40       1       0       0       2       0       8       7       8       7       75         40       2:20       1       0       0       0       2       6       8       7       7       8       91         45       2:20       1       0       0       0       5       7       8       7       7       8       105	151:00
35       2:40       1       0       0       2       0       8       7       8       7       75         40       2:20       1       0       0       0       2       6       8       7       7       8       91         45       2:20       1       0       0       0       5       7       8       7       7       8       105         50       2:20       1       0       0       0       8       8       7       8       7       7       120	151:00
35       2:40       1       0       0       2       0       8       7       8       7       75         40       2:20       1       0       0       0       2       6       8       7       7       8       91         45       2:20       1       0       0       0       5       7       8       7       7       8       105         50       2:20       1       0       0       0       8       8       7       8       7       7       120         EXCEPTIONAL EXPOSURE	151:00 169:00
35       2:40       1       0       0       2       0       8       7       8       7       75         40       2:20       1       0       0       0       2       6       8       7       7       8       91         45       2:20       1       0       0       0       5       7       8       7       7       7       120         EXCEPTIONAL EXPOSURE         55       2:20       1       0       0       4       8       7       7       8       7       7       138	151:00 169:00  190:00

**Table 15-13.** 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop	DECOMPRESSION STOPS (fsw) Stop times (min) include travel time, except first stop													Total Ascent Time	Repet			
(min)	(M:S)	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	(M:S)	Group
200 FS	SW																	'	
8	6:40																0	6:40	G
10	6:00																5	11:40	Н
15	5:20														1	1	15	23:00	K
20	3:20								1	0	0	2	0	0	5	7	25	44:00	L
25	2:00				1	0	0	0	2	0	1	0	1	7	7	7	47	75:40	L
30	1:20		1	0	0	2	0	0	0	2	0	1	7	7	8	7	69	106:00	
35	1:20		1	0	1	1	0	0	2	0	0	7	7	7	8	7	87	130:00	
40	1:00	1	0	1	1	0	0	2	0	0	5	8	7	7	8	7	104	152:40	
45	1:00	1	0	1	1	0	0	2	0	2	7	8	7	8	7	7	120	172:40	
EXCEPT	ONAL EX	(POSI	JRE -																
50	1:00	1	0	1	1	0	1	0	1	6	7	7	8	7	8	7	139	195:40	
55	1:00	1	0	1	1	0	1	0	2	8	7	7	8	7	8	8	155	215:40	
60	1:00	1	0	1	1	0	1	0	5	7	8	7	7	8	7	22	161	237:40	
210 FS	SW																		
5	7:00																0	7:00	
10	6:20																5	12:00	
15	6:00															7	5	18:40	
20	5:00												5	3	2	2	28	45:40	
25	4:20										3	3	3	2	3	3	57	79:00	
30	4:20										6	3	2	2	6	12	76	112:00	
35	3:40								3	3	3	2	3	5	12	12	95	142:20	
40	3:20							3	2	3	2	3	5	12	11	12	113	170:00	
EXCEPT	ONAL EX	(POSI	JRE -																
45	3:20							4	2	3	2	4	11	12	12	11	131	196:00	
50	3:20							4	3	2	3	10	11	12	12	11	149	221:00	
55	3:00						3	2	3	2	7	11	11	12	11	12	165	242:40	
60	3:20							5	3	2	11	12	11	11	12	21	173	265:00	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Time (Mis) (Mis)   170 160 180 140 130 120 110 100 90 80 70 60 50 40 30 20	Bottom	Time to First				Stop	time			RESSIC			` '	first	stop				Total Ascent	
1		•	170	160	150											40	30	20	1	Repet Group
10	220 F	SW																	'	
15   5.40	5	7:20																0	7:20	
20   5.00	10	6:40																5	12:20	
25 5:00	15	5:40													4	3	2	6	21:20	
30 4:00	20	5:00											4	3	2	3	2	37	56:40	
35   4:20	25	5:00											7	3	3	2	8	65	93:40	
## 10   4:20   9   3   2   12   11   12   11   126   191:00    EXCEPTIONAL EXPOSURE     4:5   3:40   6   2   3   2   10   12   11   12   11   144   217:20    50   4:00   8   8   3   8   11   12   11   11   12   164   244:40    55   4:00   9   4   12   11   12   11   11   18   177   269:40    ### 20   5:00   7:40   7:40   7:40    10   7:00   7:40   7:40   7:40   7:40    10   7:00   7:40   7:40   7:40   7:40    10   7:00   7:40   7:40   7:40    10   7:00   7:40   7:40   7:40    11   12   11   12   11   13   13:40    12   5   6:00   7:40   7:40    25   4:40   7:5   7:40   7:40   7:40    25   4:40   7:5   7:40   7:40   7:40    26   4:40   7:5   7:40   7:40   7:40    27   4:40   7:5   7:40   7:40   7:40    28   4:40   7:5   7:40   7:40   7:40    29   5:00   7:40   7:40   7:40    20   5:00   7:40   7:40   7:40    30   4:00   7:40   7:40   7:40    40   3:20   7:5   7:40   7:40   7:40    50   3:20   7:5   7:40   7:40   7:40    50   3:20   7:5   7:40   7:40   7:40    50   3:20   7:5   7:40   7:40   7:40    50   3:20   7:5   7:40   7:40   7:40    50   3:20   7:5   7:40   7:40   7:40    50   5:20   7:5   7:40   7:40   7:40    240   FSW   5   8:00   7:40   7:40   7:40   7:40    240   FSW  5   8:00   7:40   7:40   7:40   7:40    240   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    25   5:20   7:5   7:40   7:40   7:40   7:40    26   5:20   7:5   7:40   7:40   7:40   7:40    27   7:40   7:40   7:40   7:40   7:40    28   7:5   7:40   7:40   7:40   7:40   7:40    29   5:20   7:5   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:40   7:40   7:40    20   5:20   7:5   7:40   7:40   7:40   7:4	30	4:00								3	3	2	3	3	3	10	12	84	127:40	
## STATE	35	4:20									8	2	3	2	12	12	11	106	161:00	
45 3:40 6 2 3 2 10 12 11 12 11 14 217:20 50 4:00 8 3 3 8 11 12 11 11 12 11 11 12 164 244:40 55 4:00 9 4 12 11 12 11 11 11 18 177 269:40  230 FSW  5 7:40 0 0 7:40 10 7:00 6 13:40 11 5 6:00 5 3 2 3 2 3 3 2 3 3 2 3 3 2 46 67:40 20 5:00 3 3 3 2 3 2 3 3 2 3 2 3 3 2 3 12 71 106:20 30 4:00 3 3 3 2 3 2 3 2 3 2 3 12 71 106:20 30 4:00 3 3 3 2 3 2 3 2 3 2 3 12 71 106:20 30 4:00 3 3 3 2 3 2 3 2 3 12 11 11 11 11 11 11 11 11 11 17 11 11 17 11 11	40	4:20									9	3	2	12	11	12	11	126	191:00	
8 3 8 11 12 11 11 12 164 244:40 55 4:00 9 4 12 11 12 11 11 12 164 24:40  230 FSW  5 7:40	EXCEPT	IONAL EX	XPOS	JRE -																
8 3 8 11 12 11 11 12 164 244:40 55 4:00 9 4 12 11 12 11 11 11 12 164 24:40  230 FSW  5 7:40 5 7:40 5 6:00 5 5:00 5 7:40 5 7:40 7 7:00 7 7:40 10 7:00 7 7:40 10 7:00 7 8 3 3 2 9 25:40 20 5:00 7 8 3 3 2 3 3 2 3 3 2 3 3 2 3 12 71 106:20 30 4:00 30 4:	45	3:40							6	2	3	2	10	12	11	12	11	144	217:20	
230 FSW  5 7:40	50	4:00								8	3		11	12	11	11	12	164	244:40	
5 7:40 10 7:00 15 6:00 15 6:00 16 13:40 15 6:00 17 10 7:00 18 13 3 2 3 3 2 46 67:40 19 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 3 3 3 2 3 3 2 3 3 2 46 67:40 25 4:40 26 3 3 3 2 3 2 3 2 3 6 12 12 93 143:40 27 3 3 3 2 3 2 3 2 3 6 12 12 93 143:40 28 EXCEPTIONAL EXPOSURE   EXCEPTIONAL EXPOSURE  40 3:20 20 3 2 3 2 3 2 3 8 12 11 12 11 137 210:00 245 4:00 25 3:20 26 3 2 3 2 3 5 11 13 11 11 11 11 11 11 11 11 11 11 11	55	4:00								9	4	12	11	12	11	11	18	177	269:40	
5 7:40 10 7:00 15 6:00 15 6:00 16 13:40 15 6:00 17 10 7:00 18 13 3 2 3 3 2 46 67:40 19 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 5:00 20 3 3 3 2 3 3 2 3 3 2 46 67:40 25 4:40 26 3 3 3 2 3 2 3 2 3 6 12 12 93 143:40 27 3 3 3 2 3 2 3 2 3 6 12 12 93 143:40 28 EXCEPTIONAL EXPOSURE   EXCEPTIONAL EXPOSURE  40 3:20 20 3 2 3 2 3 2 3 8 12 11 12 11 137 210:00 245 4:00 25 3:20 26 3 2 3 2 3 5 11 13 11 11 11 11 11 11 11 11 11 11 11	230 F	sw																		
10 7:00 15 6:00 20 5:00 3 3 3 2 3 3 3 2 46 67:40 25 4:40 30 4:00 31 3 3 2 3 2 3 6 12 12 93 143:40 35 4:00 5 3 2 3 2 3 2 3 2 3 6 12 12 93 143:40  EXCEPTIONAL EXPOSURE  40 3:20 2 3 2 3 2 3 2 3 8 12 11 11 11 11 11 11 11 11 11 11 11 11																		0	7:40	
15 6:00 20 5:00 3 3 3 2 3 3 2 46 67:40 25 4:40 30 4:00 30 4:00 35 4:00 5 3 2 3 2 3 2 3 6 12 12 93 143:40 35 4:00 5 3 2 3 2 3 2 8 12 12 11 116 178:40  EXCEPTIONAL EXPOSURE  40 3:20 2 3 2 3 2 3 2 3 8 12 11 12 11 137 210:00 45 4:00 8 2 3 7 12 11 11 11 12 11 159 240:40 50 3:20 4 3 2 3 2 3 5 11 13 11 11 11 11 11 11 15 174 268:00 55 3:00 2 3 2 4 2 12 11 11 11 11 11 11 11 11 11 11 11 1																				
20 5:00															5	3	2			
25 4:40												3	3	2						
30 4:00 3 3 3 2 3 2 3 6 12 12 93 143:40 35 4:00 5 3 2 3 2 8 12 12 11 116 178:40  EXCEPTIONAL EXPOSURE  40 3:20 2 3 2 3 2 3 8 12 11 12 11 137 210:00 45 4:00 8 2 3 7 12 11 11 12 11 159 240:40 50 3:20 4 3 2 3 5 11 13 11 11 11 11 16 174 268:00 55 3:00 2 3 2 4 2 12 11 11 11 11 11 11 38 172 293:40   240 FSW  5 8:00 5 7 2 3 2 4 2 12 11 11 11 11 11 11 38 16:00 10 7:20 8 16:00 10 7:20 8 16:00 15 6:00 4 3 2 3 2 4 3 2 3 3 3 4 12 12 13 12 12 103 161:00 25 5:20 5 3 2 2 3 3 3 11 12 12 12 103 161:00 35 4:20 7 3 2 3 4 12 12 11 12 12 12 17 198:00  EXCEPTIONAL EXPOSURE											5									
35 4:00 5 3 2 3 2 8 12 12 11 116 178:40  EXCEPTIONAL EXPOSURE  40 3:20 2 3 2 3 2 3 8 12 11 12 11 137 210:00 45 4:00 8 2 3 7 12 11 11 12 11 159 240:40 50 3:20 4 3 2 3 5 11 13 11 11 11 11 16 174 268:00 55 3:00 2 3 2 4 2 12 11 11 11 11 11 11 38 172 293:40  240 FSW  5 8:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									3	3										
EXCEPTIONAL EXPOSURE  40 3:20 2 3 2 3 2 3 8 12 11 12 11 137 210:00  45 4:00 8 2 3 7 12 11 11 12 11 159 240:40  50 3:20 4 3 2 3 5 11 13 11 11 11 11 16 174 268:00  55 3:00 2 3 2 4 2 12 11 11 11 11 11 11 38 172 293:40  240 FSW  5 8:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																				
8 2 3 7 12 11 11 12 11 159 240:40 50 3:20			XPOS	URE -																
50 3:20	40	3:20						3	2	3	2	3	8	12	11	12	11	137	210:00	
240 FSW  5 8:00	45	4:00							8	2	3	7	12	11	11	12	11	159	240:40	
240 FSW  5 8:00	50	3:20					4	3	2	3	5	11	13	11	11	11	16	174	268:00	
5       8:00       0       8:00         10       7:20       8       16:00         15       6:00       4       3       2       4       15       34:40         20       5:20       5       2       3       2       2       8       12       80       122:00         30       4:20       5       3       2       2       8       12       10       161:00         35       4:20       7       3       2       3       4       12       11       12       12       198:00         EXCEPTIONAL EXPOSURE         40       4:20       8       3       3       4       12       11       12       12       15       232:00         45       4:20       10       2       4       12       11       12       11       12       173       264:00	55	3:00				2	3	2	4	2	12	11	11	11	11	11	38	172	293:40	
5       8:00       0       8:00         10       7:20       8       16:00         15       6:00       4       3       2       4       15       34:40         20       5:20       5       2       3       2       2       8       12       80       122:00         30       4:20       5       3       2       2       8       12       10       161:00         35       4:20       7       3       2       3       4       12       11       12       12       198:00         EXCEPTIONAL EXPOSURE         40       4:20       8       3       3       4       12       11       12       12       15       232:00         45       4:20       10       2       4       12       11       12       11       12       173       264:00	240 E	21//																		
10 7:20																		0	9.00	
15 6:00																				
20 5:20														1	2	2	1			
25 5:20 9 3 2 2 8 12 80 122:00 30 4:20 5 3 2 2 3 3 11 12 12 103 161:00 35 4:20 7 3 2 3 4 12 11 12 12 12 17 198:00  EXCEPTIONAL EXPOSURE  40 4:20 8 3 3 4 12 12 11 12 12 150 232:00 45 4:20 10 2 4 12 12 11 12 11 12 173 264:00												E	2							
30 4:20 5 3 2 2 3 3 11 12 12 103 161:00 35 4:20 7 3 2 3 4 12 11 12 12 12 198:00  EXCEPTIONAL EXPOSURE  40 4:20 8 3 3 4 12 12 11 12 12 150 232:00 45 4:20 10 2 4 12 12 11 12 11 12 173 264:00																				
35     4:20     7     3     2     3     4     12     11     12     12     12     198:00       EXCEPTIONAL EXPOSURE       40     4:20     8     3     3     4     12     12     11     12     12     150     232:00       45     4:20     10     2     4     12     12     11     12     11     12     173     264:00									_	2	2									
EXCEPTIONAL EXPOSURE																				
40       4:20       8       3       3       4       12       12       11       12       15       232:00         45       4:20       10       2       4       12       12       11       12       11       12       173       264:00			XPO9	IRE						3		3		12	11	12	12	121	190.00	
45 4:20 10 2 4 12 12 11 12 11 12 173 264:00			A 03						Ω	3	3	<u> </u>	12	12	11	12	12	150	232:00	
	50	3:40					6	3	2	3	12	11	11	12	11	11				

**Table 15-13.** 1.3 at  $ppO_2$  HeO $_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time to First				Stop	time			RESSIC				first	stop				Total Ascent	
Time (min)	Stop (M:S)	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Time (M:S)	Repet Group
250 F		1																()	
5	8:20																0	8:20	
10	7:40																9	17:20	
15	6:20												5	3	3	2	24	44:00	
20	5:40										6	3	2	3	3	6	61	90:20	
25	5:00								6	3	2	2	3	3	12	12	87	135:40	
30	4:20						4	3	3	2	3	2	8	11	12	12	112	177:00	
EXCEPT		XPOSI	JRF -				<u> </u>												
35	4:40							9	2	3	2	10	12	12	11	12	139	217:20	
40	4:20						8	3	2	3	11	12	11	11	12	11	164	253:00	
45	4:00					7	3	3	2	11	11	12	11	11	12	25		287:40	
50	3:40				6	2	3	3	9	12	11	11	12	11	11	49	175	319:20	
260 F	SW																		
5	8:40																0	8:40	
10	8:00																11	19:40	
15	6:20											4	3	3	2	3	31	53:00	
20	5:40									5	3	3	2	3	3	10	67	102:20	
25	5:20								8	3	2	2	3	7	13	12	96	152:00	
30	4:40						6	3	2	3	2	3	12	12	13	11	123	195:20	
EXCEPT	IONAL EX	XPOSI	JRE -																
35	4:40						8	3	3	2	6	12	12	11	12	11	151	236:20	
40	4:20					8	3	2	3	7	12	12	11	11	12	14	175	275:00	
45	4:00				7	3	2	3	8	12	11	11	11	12	11	42	173	310:40	
270 F	SW																		
5	8:20																5	14:00	
10	8:20																13	22:00	
15	6:20										3	3	3	2	3	3	39	63:00	
20	6:20										9	3	2	3	5	12	75	116:00	
25	5:40								9	3	2	3	3	12	11	12	105	166:20	
EXCEPT	IONAL EX	KPOSU	JRE -																
30	5:00						8	3	2	3	2	9	11	12	11	12	134	212:40	
35	4:40					8	3	2	3	3	11	12	12	11	11	12	163	256:20	
40	4:20				8	3	3	1	5	12	12	11	11	11	12	30	174	298:00	
45	4:20				9	3	2	5	12	13	10	11	11	12	11	56	176	336:00	

**Table 15-13.** 1.3 ata  $ppO_2$   $HeO_2$  Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time						DFC	OMPE	RESSIG	ON ST	OPS	(fsw)						Total	
Bottom	to First				Stop	time			ude tr				first	stop				Ascent	
Time (min)	Stop (M:S)	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Time (M:S)	Repet Group
280 F	SW	1																, ,	
5	8:40																5	14:20	
10	8:40																14	23:20	
15	7:00											7	3	2	3	3	47	72:40	
20	6:20									9	2	3	2	3	9	12	82	129:00	
25	5:20						6	3	3	2	3	2	7	12	12	12	114	182:00	
EXCEPT	IONAL EX	XPOS	URE -																
30	5:20						10	3	2	3	3	12	12	11	12	12	145	231:00	
35	4:40				8	2	3	2	3	8	12	12	11	11	11	13	176	277:20	
40	4:40				10	2	3	2	11	12	11	12	12	10	12	45	174	321:20	
45	4:40				11	3	3	11	11	12	11	11	11	12	11	72	178	362:20	
290 F	SW																		
5	9:00																5	14:40	
10	8:00													4	4	2	6	24:40	
15	7:00										6	3	2	3	3	2	55	81:40	
20	6:20								8	2	3	2	3	4	12	12	88	141:00	
25	5:40						8	3	2	3	3	2	12	12	11	12	122	196:20	
EXCEPT	IONAL EX	XPOS	URE -																
30	5:00				7	3	2	3	3	2	9	12	12	11	11	12	156	248:40	
35	5:00				10	2	3	2	5	12	11	12	11	11	12	28	176	300:40	
40	5:00				12	2	3	7	12	11	12	11	11	11	12	59	177	345:40	
45	5:00				13	3	9	11	12	11	11	11	11	11	18	82	180	388:40	
300 F	SW																		
5	9:20																5	15:00	
10	8:20													6	3	2	9	29:00	
15	7:00									5	3	2	3	2	3	5	61	91:40	
20	6:20							7	3	2	3	2	4	6	12	12	96	154:00	
25	5:20				5	3	2	3	3	2	3	7	12	11	12	11	132	212:00	
EXCEPT	IONAL EX	XPOS	URE -																
30	5:20				9	3	2	3	2	5	12	12	11	11	12	12	169	269:00	
35	5:20				12	2	3	2	10	12	11	12	11	11	12	41	176	321:00	
40	5:20				14	2	4	12	12	11	11	12	11	11	11	74	180	371:00	

**Table 15-13.** 1.3 ata ppO<sub>2</sub> HeO<sub>2</sub> Decompression Tables (Continued). (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First				Stop	time			RESSIC			٠,	first	stop				Total Ascent	
Time (min)	Stop (M:S)	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	Time (M:S)	Repet Group
310 F	SW																		
EXCEPT	IONAL EX	(POSL	JRE -																
10	8:20												5	2	3	3	14	36:00	
15	7:20									6	3	3	2	3	2	9	66	102:00	
20	6:20						6	3	2	3	2	3	3	12	11	12	103	167:00	
25	6:00					9	3	2	3	3	2	12	11	12	12	11	142	228:40	
30	5:40				11	3	2	2	3	10	12	11	11	12	12	17	176	288:20	
35	5:40				14	2	3	6	12	11	12	11	11	11	12	55	178	344:20	
40	5:40				16	2	10	12	11	12	11	11	11	11	19	83	182	397:20	

#### **320 FSW**

EXCEP1	ΓΙΟΝΑL EXP	OSURE															
10	8:20									4	2	3	3	2	21	44:00	
15	7:40							8	3	2	3	2	3	12	71	112:20	
20	6:20			6	2	3	2	3	2	4	5	12	12	12	111	181:00	
25	6:20			11	3	2	2	3	7	12	11	12	11	12	153	246:00	
30	6:00		13	2	3	2	6	12	11	12	11	11	12	30	177	308:40	
35	6:00		15	3	3	11	12	11	12	11	11	11	12	68	182	368:40	
40	6:00		18	7	11	12	11	11	11	12	11	11	35	83	185	424:40	

## $\mathbf{0.75}$ ata $\mathbf{ppO}_{2}$ $\mathbf{N}_{2}\mathbf{O}_{2}$ Tables

# No-Decompression Limits and Repetitive Group Designation Table for 0.75 ata $ppO_2$ $N_2O_2$ Dives

**Table 15-14.** No-Decompression Limits and Repetitive Group Designation Table for 0.75 at Constant ppO, N,O, Dives.

Depth							R	epetiti	ve Gro	up De	signate	or					
(fsw)	No-Stop Limit	Α	В	С	D	E	F	G	Н		J	K	L	M	N	0	Z
10	Unlimited	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
15	Unlimited	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
20	Unlimited	154	425	*													
30	Unlimited	31	50	73	98	128	165	211	274	375	643	*					
40	369	17	27	38	50	63	76	91	107	125	144	167	192	223	259	305	369
50	143	12	19	26	33	41	50	59	68	78	88	99	111	123	137	143	
60	74	9	14	19	25	31	37	43	50	56	63	71	74				
70	51	7	11	15	20	25	29	34	39	44	50	51					
80	40	6	9	13	16	20	24	28	32	36	40						
90	32	5	8	11	14	17	20	24	27	31	32						
100	27	4	7	9	12	15	18	21	24	27							
110	23	3	6	8	11	13	16	18	21	23							
120	20	3	5	7	9	12	14	16	18	20							
130	16		4	6	8	10	12	14	16								
140	14		4	6	7	9	11	13	14								
150	11		3	5	7	8	10	11									
Exception	nal Exposure																
160	10		3	4	6	8	9	10									
170	9		3	4	5	7	8	9									

<sup>-</sup> Diver does not acquire a repetitive group designator during dives to these depths.

<sup>\*</sup> Highest repetitive group that can be achieved at this depth regardless of bottom time.

#### Residual Nitrogen Timetable for Repetitive 0.75 at a ppO $_2$ N $_2$ O $_2$ Dives

**Table 15-15.** Residual Nitrogen Timetable for Repetitive 0.75 at a Constant  $ppO_2 N_2O_2$  Dives.

Locate th above th lies.		Read ho	orizonta	lly to the	interva	l in whic	ch the di	ver's su	ırface in	terval				B 0:10	0:10 1:16 0:56	0:10 2:20 * 1:17 3:36 * 2:12
Next, reaction of the depth is residual repetitive.	e downw h of the al nitrog	ally dow vard in the repetitive en time,	nward this same dive. It is minu	o the ne columr The time Ites, to b	w repet to the given a e applie	itive gro row that at the in ed to the	oup design t represe tersection e	gnation. ents en	Hace I	nterval	E	D 0:10 0:52	0:10 0:52 0:53 1:44	0:55 0:53 1:47 1:45 2:39	2:11 1:48 3:03 2:40 3:55	4:31 * 3:04 5:23 * 3:56 6:15 *
* Dives for this are r bottom to 15-16 to for such	not repe imes in t comput	surface titive div the Table e decom	interva es. Use es 15-14 apressio	ls longei actual and n	than	at Be	0:10 0:52 0:53 1:44 1:45	Jof Su	G 0:10 0:52	0:10 0:52 0:53 1:44	0:10 0:52 0:53 1:44 1:45 2:37	0:53 1:44 1:45 2:37 2:38 3:29	1:45 2:37 2:38 3:29 3:30 4:21	2:38 3:31 3:30 4:23 4:22 5:16	3:32 4:48 4:24 5:40 5:17 6:32	4:49 7:08 * 5:41 8:00 * 6:33 8:52 *
ioi suoii	diveo.			10	Group		0:10	0:10 0:52 0:53	0:53 1:44 1:45	1:45 2:37 2:38	2:38 3:29 3:30	3:30 4:21 4:22	4:22 5:13 5:14	5:14 6:08 6:07	6:09 7:24 7:01	7:25 9:44 * 8:17
			Rep	etitiv	K	0:10 0:52	0:52 0:53 1:44	1:44 1:45 2:37	2:37 2:38 3:29	3:29 3:30 4:21	4:21 4:22 5:13	5:13 5:14 6:06	6:06 6:07 6:58	7:00 6:59 7:52	8:16 7:53	10:36 * 9:10 11:29 *
			M >	0:10	0:52 0:53	1:44 1:45	2:37 2:38	3:29 3:30	4:21 4:22	5:13 5:14	6:06 6:07	6:07 6:58 6:59	6:59 7:50 7:51	7:51 8:44 8:43	10:01 9:38	10:02 12:21 * 10:54
_		N N	0:10 0:52	0:52 0:53 1:44	1:44 1:45 2:37	2:37 2:38 3:29	3:29 3:30 4:21	4:21 4:22 5:13	5:13 5:14 6:06	6:06 6:07 6:58	6:58 6:59 7:50	7:50 7:51 8:42	8:42 8:43 9:34	9:37 9:35 10:29	10:30 11:45	14:05 *
	0:10 0:52	0:10 0:52 0:53 1:44	0:53 1:44 1:45 2:37	1:45 2:37 2:38 3:29	2:38 3:29 3:30 4:21	3:30 4:21 4:22 5:13	4:22 5:13 5:14 6:06	5:14 6:06 6:07 6:58	6:07 6:58 6:59 7:50	6:59 7:50 7:51 8:42	7:51 8:42 8:43 9:34	8:43 9:34 9:35 10:27	9:35 10:27 10:28 11:19	10:28 11:21 11:20 12:13	12:14	14:58 *
Dive	Z	0	N	M	L	К	J Group a	I	Н	G	F	Е	D	С	В	A
Depth	$\vee$	$\vee$	$\bigvee$	$\vee$		$\bigvee$		$\vee$	$\vee$	$\vee$	$\vee$	$\vee$	$\vee$	$\vee$	$\vee$	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
15	**	**	**	**	**	**	**	**	**	**	**	**	**	**	420	450
20 30	**	**	**	**	**	**	626	372	273	211	165	129	99	73	420 51	153 31
40	365	303	258	222	192	167	144	125	107	91	77	63	51	39	28	18
50	167	151	137	123	111	99	88	78	68	59	50	42	34	27	19	12
60	113	104	95	87	79	71	64	57	50	44	38	32	26	20	15	10
70	86	79	73	67	61	56	50	45	40	35	30	25	21	16	12	8
80	69	64	60	55	50	46	41	37	33	29	25	21	18	14	10	7
90	58	54	50	46	43	39	35	32	28	25	22	18	15	12	9	6
100	50	47	44	40	37	34	31	28	25	22	19	16	13	11	8	5
110	44	41	38	36	33	30	27	25	22	19	17	14	12 11	9	7	5
120 130	39 36	37 33	34 31	32 29	29 27	27 24	25 22	22 20	20 18	18 16	15 14	13 12	10	9	6 6	4
140	33	30	28	26	24	22	20	18	17	15	13	11	9	7	5	4
150	30	28	26	24	22	21	19	17	15	14	12	10	8	7	5	3
160	28	26	24	23	21	19	18	16	14	13	11	9	8	6	5	3
170	26	24	23	21	19	18 <b>Residu</b>	16 <b>al Nitrog</b>	15 en Time	13 es (Minu	12 <b>tes)</b>	10	9	7	6	4	3

Repetitive dives to these depths are equivalent to remaining on the surface. Add the bottom time of the dive to the preceding surface interval. Use the Surface Interval Credit Table (SICT) to determine the repetitive group at the end of the dive.

<sup>\*\*</sup> Residual Nitrogen Time cannot be determined using this table. See paragraph 9-9.1 subparagraph 8 for guidance. Substitute the \*\* depths in this table for those in the instructions.

## Repetitive Dive Worksheet for 0.75 ATA $N_2O_2$ Dives

REF	PETITIVE DIVE WORKSHEET FOR $0.75$ ata $ppO_2 N_2O_2$ DIVES
	minutes
_	feet
_	repetitive group designator from Table 15-14  if the dive was a no-decompression dive, or  Table 15-16 if the dive was a decompression dive.
Part 2. Surface Interval:	
and move horizontally to the	e 15-15 at the row for the repetitive group designator from Part 1 column in which the actual or planned surface interval time lies. up designator from the bottom of this column.
_	hours minutes on the surface
_	final repetitive group from Table 15-15
Part 3. Equivalent Single Dive Ti	ime for the Repetitive Dive:
repetitive dive. Move horizon Part 2 to find the Residual Ni	Table 15-15 at the row for the maximum depth of the planned stally to the column of the final repetitive group designator from itrogen Time (RNT). Add this RNT to the planned bottom time for the equivalent single dive time.
minute	s: RNT
+ minute	s: planned bottom time
= <i>minute</i>	s: equivalent single dive time
Part 4. Decompression Schedul	e for the Repetitive Dive:
to the column with bottom tin and read the surfacing repeti equivalent single dive time ex and equivalent single dive tin	of the planned repetitive dive in Table 15-14. Move horizontally ne equal to or just greater than the equivalent single dive time itive group for the repetitive dive from the top of the column. If the exceeds the no-decompression limit, locate the row for the depth me in Table 15-16. Read the required decompression stops and m the columns to the right along this row.
minutes.	equivalent single dive time from Part 3
feet: dep	oth of the repetitive dive.
Schedul	le (depth/bottom time) from Table 15-14 or Table 15-16.
Ensure RNT Exception Rule does Verify allowable repet from Table 1	

**Figure 15-10.** Dive Worksheet for Repetitive 0.75 ata  ${\rm ppO_2}\ {\rm N_2O_2}$  Dives.

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at appO $_2$  N $_2$ O $_2$  (DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time					ON STOPS				Total	
Bottom Time	to First Stop			Stop till		nclude trav first stop	ver time,			Ascent Time	Repet
(min)	(M:S)	80	70	60	50	40	30	20	10	(M:S)	Group
<b>40 FSW</b>											
369	1:20								0	1:20	Z
370	1:00								1	2:20	Z
380	1:00								2	3:20	Z
390	1:00								3	4:20	Z
50 FSW											
143	1:40								0	1:40	0
150	1:20								3	4:40	0
160	1:20								8	9:40	0
170	1:20								12	13:40	0
180	1:20								15	16:40	Z
190	1:20								19	20:40	Z
200	1:20								22	23:40	Z
210	1:20								25	26:40	Z
220	1:20								29	30:40	Z
230	1:20								33	34:40	Z
240	1:20								37	38:40	Z
250	1:20								42	43:40	Z
260	1:20								45	46:40	Z
270	1:20								49	50:40	Z
280	1:20								52	53:40	Z
290	1:20								56	57:40	Z
300	1:20								59	60:40	Z
310	1:20								61	62:40	Z
320	1:20								64	65:40	Z
330	1:20								67	68:40	Z
Exceptional Exp											
340	1:20								69	70:40	
350	1:20								73	74:40	
360	1:20								77	78:40	
370	1:20								80	81:40	
380	1:20								83	84:40	
390	1:20								87	88:40	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at app $O_2 N_2 O_2$  (Continued).

Total   National Procession   National Pr					DECOM	/IPRESSI	ON STOPS	S (FSW)			] <b>_</b>	
Min   Min						nes (min) i	nclude tra					
60 FSW           74         2:00         0         2:00         L           75         1:40         1         3:00         L           80         1:40         8         10:00         M           90         1:40         12         1:4:00         N           110         1:40         16         18:00         O           120         1:40         22         26:00         O           130         1:40         32         3:4:00         O           140         1:40         38         40:00         Z           150         1:40         38         40:00         Z           160         1:40         55         50:00         Z           160         1:40         55         57:00         Z           180         1:20         3         60         64:40         Z           180         1:20         3         60         64:40         Z           200         1:20         3         60         64:40         Z           2190         1:20         3         60         64:40         Z           220         1:20				70	00			00	00	40		
74         2:00         2:00         L           75         1:40         1         3:00         L           80         1:40         3         5:00         L           90         1:40         12         14:00         M           110         1:40         16         18:00         O           120         1:40         32         34:00         O           130         1:40         38         40:00         Z           140         38         40:00         Z           140         38         40:00         Z           140         44         46:00         Z           150         1:40         58         50         52:00         Z           160         1:40         55         57:00         Z           180         1:20         3         60         64:40         Z           180         1:20         3         60         64:40         Z           200         1:20         3         67         140         Z           220         1:20         3         67         102         Z           220         1:20 <td< th=""><th>, ,</th><th>(IVI:S)</th><th>80</th><th>70</th><th>60</th><th>50</th><th>40</th><th>30</th><th>20</th><th>10</th><th>(IVI:5)</th><th>Group</th></td<>	, ,	(IVI:S)	80	70	60	50	40	30	20	10	(IVI:5)	Group
75         1.40         1         3.00         L           80         1.40         3         5.00         L           90         1.40         8         10.00         M           110         1.40         12         14.00         N           110         1.40         16         18.00         O           120         1.40         24         26.00         O           130         1.40         32         34.00         C           140         1.40         38         40.00         Z           150         1.40         38         40.00         Z           160         1.40         44         46.00         Z           150         1.40         50         52.00         Z           160         1.40         50         52.00         Z           170         1.40         50         52.00         Z           180         1.20         3         60         64.40         Z           190         1.20         3         60         64.40         Z           200         1.20         15         69         85.40         Z												
80												
90												
100												
110         1:40         16         18:00         O           120         1:40         24         26:00         O           130         1:40         32         34:00         O           140         1:40         38         40:00         Z           150         1:40         44         46:00         Z           160         1:40         50         55         57:00         Z           170         1:40         3         60         64:40         Z           180         1:20         3         60         64:40         Z           190         1:20         3         60         64:40         Z           200         1:20         15         69         85:40         Z           210         1:20         15         69         85:40         Z           220         1:20         19         71         91:40         Z           240         1:20         25         76         102:40         Z           250         1:20         30         82         113:40           270         1:20         35         88         124:40           2												
120												
130   1:40   32   34:00   0   140   1:40   38   40:00   2   150   1:40   44   46:00   2   160   1:40   55   52:00   2   170   1:40   55   57:00   2   170   1:40   55   57:00   2   180   1:20   88   62   71:40   2   190   1:20   12   65   78:40   2   200   1:20   12   65   78:40   2   220   1:20   12   65   78:40   2   220   1:20   12   65   78:40   2   220   1:20   15   69   85:40   2   220   1:20   19   71   91:40   2   220   220   1:20   19   71   91:40   2   220   220   1:20   22   74   97:40   2   220   250   1:20   27   80   108:40   2   2   2   2   2   2   2   2   2		1:40								16		
140												
150       1;40       44       46:00       Z         160       1;40       50       52:00       Z         170       1;40       55       57:00       Z         180       1;20       3       60       64:40       Z         190       1;20       8       62       71:40       Z         200       1;20       15       69       85:40       Z         210       1;20       15       69       85:40       Z         220       1;20       19       71       91:40       Z         230       1;20       25       76       102:40       Z         240       1;20       25       76       102:40       Z         250       1;20       30       82       113:40       Z         250       1;20       30       82       113:40       Z         280       1;20       30       82       113:40       Z         280       1;20       35       88       124:40       Z         290       1;20       40       90       131:40       Z         310       1;20       43       93       137:40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												
160												
170       1:40       55       57:00       Z         180       1:20       3       60       64:40       Z         190       1:20       8       62       71:40       Z         200       1:20       12       65       78:40       Z         210       1:20       15       69       85:40       Z         220       1:20       19       71       91:40       Z         230       1:20       22       74       97:40       Z         240       1:20       25       76       102:40       Z         250       1:20       27       80       108:40       Z         Exceptional Exposure         260       1:20       30       82       113:40       Z         270       1:20       32       85       118:40       113:40       113:40       113:40       113:40       113:40       114:40 <t< td=""><td>150</td><td>1:40</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>44</td><td>46:00</td><td></td></t<>	150	1:40								44	46:00	
180       1:20       3       60       64:40       Z         190       1:20       8       62       71:40       Z         200       1:20       12       65       78:40       Z         210       1:20       15       69       85:40       Z         220       1:20       19       71       91:40       Z         240       1:20       25       76       102:40       Z         250       1:20       27       80       108:40       Z         Exceptional Exposure	160	1:40								50	52:00	
190   1:20   1:20   1:2   65   78:40   Z	170	1:40								55	57:00	Z
120   120   120   15   69   85:40   Z	180	1:20							3	60	64:40	Z
210       1:20       15       69       85:40       Z         220       1:20       19       71       91:40       Z         230       1:20       22       74       97:40       Z         240       1:20       25       76       102:40       Z         250       1:20       30       82       113:40       Z         260       1:20       32       85       118:40       31       32       85       118:40       32       35       88       124:40       32       35       313:40       32       35       313:40       33       33:40       33       33:40       33       33:40       33       33:40       33       33:40       33       33:40 <t< td=""><td>190</td><td>1:20</td><td></td><td></td><td></td><td></td><td></td><td></td><td>8</td><td>62</td><td>71:40</td><td>Z</td></t<>	190	1:20							8	62	71:40	Z
220       1:20       1:20       2       74       91:40       Z         240       1:20       25       76       102:40       Z         250       1:20       27       80       108:40       Z         Exceptional Exposure ————————————————————————————————————	200	1:20							12	65	78:40	Z
230   1:20   22   74   97:40   Z   240   1:20   25   76   102:40   Z   250   1:20   27   80   108:40   Z   250   27   80   108:40   Z   250   27   27   27   280   280   280   290   200	210	1:20							15	69	85:40	Z
240       1:20       25       76       102:40       Z         250       1:20       27       80       108:40       Z         Exceptional Exposure	220	1:20							19	71	91:40	Z
250         1:20         27         80         108:40         Z           Exceptional Exposure           260         1:20         30         82         113:40           270         1:20         32         85         118:40           280         1:20         35         88         124:40           290         1:20         40         90         131:40           300         1:20         43         93         137:40           310         1:20         47         94         142:40           320         1:20         51         96         148:40           330         1:20         54         98         153:40           340         1:20         57         100         158:40           350         1:20         63         105         169:40           360         1:20         65         109         175:40           370         1:20         68         112         181:40	230	1:20							22	74	97:40	Z
Exceptional Exposure         260       1:20       30       82       113:40         270       1:20       32       85       118:40         280       1:20       35       88       124:40         290       1:20       40       90       131:40         300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	240	1:20							25	76	102:40	Z
260       1:20       30       82       113:40         270       1:20       32       85       118:40         280       1:20       35       88       124:40         290       1:20       40       90       131:40         300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	250	1:20							27	80	108:40	Z
270       1:20       32       85       118:40         280       1:20       35       88       124:40         290       1:20       40       90       131:40         300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	Exceptional Exp	osure										
280       1:20       35       88       124:40         290       1:20       40       90       131:40         300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	260	1:20						'	30	82	113:40	
290       1:20       40       90       131:40         300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	270	1:20							32	85	118:40	
300       1:20       43       93       137:40         310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	280	1:20							35	88	124:40	
310       1:20       47       94       142:40         320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	290	1:20							40	90	131:40	
320       1:20       51       96       148:40         330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	300	1:20							43	93	137:40	
330       1:20       54       98       153:40         340       1:20       57       100       158:40         350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	310	1:20							47	94	142:40	
340     1:20     57     100     158:40       350     1:20     60     102     163:40       360     1:20     63     105     169:40       370     1:20     65     109     175:40       380     1:20     68     112     181:40	320	1:20							51	96	148:40	
350       1:20       60       102       163:40         360       1:20       63       105       169:40         370       1:20       65       109       175:40         380       1:20       68       112       181:40	330	1:20							54	98	153:40	
360     1:20       370     1:20       380     1:20       65     109       120     68       112     181:40	340	1:20							57	100	158:40	
370     1:20     65     109     175:40       380     1:20     68     112     181:40	350	1:20							60	102	163:40	
370     1:20     65     109     175:40       380     1:20     68     112     181:40	360	1:20							63	105	169:40	
380 1:20 68 112 181:40	370	1:20							65	109	175:40	
	380	1:20							68	112	181:40	
		1:20							70	115		

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at appO $_2$   $N_2$ O $_2$  (Continued).

	Time					ON STOPS	. ,			Total	
Bottom Time	to First Stop			Stop tim		nclude trav first stop	vel time,			Ascent Time	Repet
(min)	(M:S)	80	70	60	50	40	30	20	10	(M:S)	Group
<b>70 FSW</b>											
51	2:20								0	2:20	K
55	2:00								4	6:20	K
60	2:00								9	11:20	K
70	2:00								17	19:20	L
80	2:00								24	26:20	M
90	1:40							2	29	33:00	Ν
100	1:40							7	34	43:00	0
110	1:40							12	39	53:00	0
120	1:40							15	46	63:00	0
130	1:40							18	52	72:00	Z
140	1:40							21	57	80:00	Z
150	1:40							29	58	89:00	Z
160	1:40							36	62	100:00	Z
170	1:40							42	66	110:00	Z
180	1:40							48	70	120:00	Z
Exceptional Exp	osure										
190	1:20						1	53	73	128:40	
200	1:20						2	57	77	137:40	
210	1:20						6	57	81	145:40	
220	1:20						10	57	84	152:40	
230	1:20						14	59	87	161:40	
240	1:20						18	62	89	170:40	
250	1:20						21	66	91	179:40	
260	1:20						24	69	94	188:40	
270	1:20						26	72	97	196:40	
280	1:20						29	75	99	204:40	
290	1:20						31	78	102	212:40	
300	1:20						33	81	105	220:40	
310	1:20						35	83	110	229:40	
320	1:20						37	86	113	237:40	
330	1:20						41	86	118	246:40	
340	1:20						45	86	124	256:40	
350	1:20						49	88	127	265:40	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at app $O_2 N_2 O_2$  (Continued).

			,						,	1	
Bottom Time (min)	Time to First Stop (M:S)	80	70		nes (min) i	ON STOPS include trav first stop 40		20	10	Total Ascent Time (M:S)	Repet Group
80 FSW	(141.5)	00	70	00	30	40	30	20	10	(101.5)	Group
	0.10									0.10	
40	2:40								0	2:40	J
45	2:20								8	10:40	K
50	2:20								15	17:40	K
55	2:20								21	23:40	L
60	2:20								27	29:40	L
70	2:00							9	28	39:20	M
80	2:00							17	29	48:20	N
90	2:00							24	36	62:20	0
100	1:40						2	29	43	76:00	0
110	1:40						7	29	50	88:00	Z
120	1:40						12	29	57	100:00	Z
Exceptional Exp	osure									•	
130	1:40						15	37	58	112:00	
140	1:40						18	43	62	125:00	
150	1:40						21	49	67	139:00	
160	1:40						23	56	70	151:00	
170	1:40						29	57	75	163:00	
180	1:40						36	57	80	175:00	
190	1:40						42	57	85	186:00	
200	1:20					1	48	60	86	196:40	
210	1:20					2	52	64	90	209:40	
220	1:20					2	57	68	93	221:40	
230	1:20					6	57	73	96	233:40	
240	1:20					10	57	77	100	245:40	
250	1:20					14	57	81	104	257:40	
260	1:20					18	56	85	110	270:40	
270	1:20					21	59	86	116	283:40	
280	1:20					24	63	85	124	297:40	
290	1:20					26	67	86	129	309:40	
300	1:20					29	70	88	134	322:40	
310	1:20					31	73	92	137	334:40	
320	1:20					33	76	95	141	346:40	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at appO $_2$   $N_2$ O $_2$  (Continued).

Bottom Time	Time to First Stop					ON STOPS nclude trav irst stop	. ,			Total Ascent Time	Repet
(min)	(M:S)	80	70	60	50	40	30	20	10	(M:S)	Group
90 FSW											
32	3:00								0	3:00	J
35	2:40								5	8:00	J
40	2:40								14	17:00	K
45	2:40								23	26:00	K
50	2:20							3	28	33:40	L
55	2:20							10	28	40:40	L
60	2:20							17	28	47:40	M
70	2:20							28	29	59:40	N
80	2:00						10	29	34	75:20	0
90	2:00						18	29	44	93:20	Z
Exceptional Exp	osure										
100	2:00						25	29	52	108:20	
110	1:40					3	29	33	56	123:00	
120	1:40					8	29	41	62	142:00	
130	1:40					12	29	49	67	159:00	
140	1:40					16	29	56	73	176:00	
150	1:40					19	36	57	76	190:00	
160	1:40					21	43	57	81	204:00	
170	1:40					23	50	57	89	221:00	
180	1:40					25	56	62	91	236:00	
190	1:40					31	57	67	95	252:00	
100 FSW											
27	3:20								0	3:20	ı
30	3:00								6	9:20	J
35	3:00								18	21:20	J
40	3:00								28	31:20	K
45	2:40							10	28	41:00	L
50	2:40							19	28	50:00	М
55	2:40							27	29	59:00	М
60	2:20						7	28	28	65:40	N
65	2:20						14	28	28	72:40	0
Exceptional Exp	osure										
70	2:20	,					20	28	32	82:40	
75	2:20						26	28	37	93:40	
80	2:00					3	28	29	42	104:20	
90	2:00					12	29	28	53	124:20	
100	2:00					20	29	34	61	146:20	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at app $O_2 N_2 O_2$  (Continued).

	Time to First				MPRESSIC nes (min) in	nclude trav				Total Ascent	
Bottom Time (min)	Stop (M:S)	80	70	60	except f	rst stop 40	30	20	10	Time (M:S)	Repet Group
110 FSW		1								ı	
23	3:40								0	3:40	I
25	3:20								4	7:40	J
30	3:20								18	21:40	J
35	3:00							3	28	34:20	K
40	3:00							14	29	46:20	L
45	3:00							25	29	57:20	L
50	2:40						7	29	28	67:00	M
55	2:40						16	29	28	76:00	N
Exceptional Exp	osure									-	
60	2:40						25	28	29	85:00	
65	2:20					4	29	28	33	96:40	
70	2:20					11	29	28	40	110:40	
80	2:20					24	28	29	52	135:40	
90	2:00				6	29	28	34	65	164:20	
120 FSW											
20	4:00								0	4:00	I
25	3:40								14	18:00	J
30	3:20							3	27	33:40	J
35	3:20							15	29	47:40	K
40	3:00						4	25	28	60:20	L
45	3:00						12	29	28	72:20	M
Exceptional Exp	osure									-	
50	2:40					1	23	28	28	83:00	
55	2:40					5	29	28	29	94:00	
60	2:40					15	28	28	35	109:00	
70	2:20				3	28	29	28	50	140:40	
80	2:20				17	28	29	31	68	175:40	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at appO $_2$   $N_2$ O $_2$  (Continued).

Bottom Time	Time to First Stop				MPRESSIC nes (min) in except f	nclude trav				Total Ascent Time	Repet
(min)	(M:S)	80	70	60	50	40	30	20	10	(M:S)	Group
130 FSW											
16	4:20								0	4:20	Н
20	4:00								5	9:20	I
25	3:40							4	20	28:00	J
30	3:20						2	11	28	44:40	K
35	3:20						7	21	29	60:40	L
Exceptional Exp	osure										
40	3:00					1	14	28	28	74:20	
45	3:00					7	21	28	29	88:20	
50	3:00					12	28	28	29	100:20	
55	2:40				3	20	28	29	34	117:00	
60	2:40				7	26	28	29	43	136:00	
70	2:40				23	28	28	29	67	178:00	
140 FSW											
14	4:40								0	4:40	Н
15	4:20								1	5:40	Н
20	4:00							3	11	18:20	J
25	3:40						3	7	24	38:00	K
30	3:20					1	7	17	28	56:40	L
Exceptional Exp	osure										
35	3:20					4	13	24	29	73:40	
40	3:20					11	18	28	28	88:40	
45	3:00				4	14	25	29	28	103:20	
50	3:00				10	18	28	29	35	123:20	
60	2:40			5	18	28	29	28	61	172:00	
70	2:40			14	28	29	28	36	80	218:00	

**Table 15-16.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at app $O_2 N_2 O_2$  (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Time to First Stop				es (min) ir	nclude trav				Total Ascent Time	Repet
(M:S)	80	70	60	50	40	30	20	10	(M:S)	Group
5:00								0	5:00	G
4:40								6	11:00	Н
4:00						2	7	14	27:20	J
3:40					2	7	9	27	49:00	K
3:40					7	9	20	28	68:00	M
sure									-	
3:20				3	10	14	28	28	86:40	
3:20				7	14	22	28	29	103:40	
3:00			1	14	15	29	28	35	125:20	
3:00			7	14	23	29	28	49	153:20	
2:40		3	14	24	29	28	32	76	209:00	
2:40		10	24	28	29	28	52	91	265:00	
	5:00 4:40 4:00 3:40 3:40 3:20 3:20 3:00 3:00 2:40	5:00 4:40 4:00 3:40 3:40 3:20 3:20 3:20 3:00 3:00 2:40	to First Stop (M:S) 80 70  5:00 4:40 4:00 3:40 3:40 sure	Stop time  to First Stop (M:S) 80 70 60  5:00 4:40 4:00 3:40 3:40 3:20 3:20 3:20 3:00 1 3:00 7 2:40 3 14	Stop times (min) in except for (M:S) 80 70 60 50  5:00 4:40 4:00 3:40 3:40 3:20 3:20 3:20 7 3:00 1 14 3:00 7 14 2:40 3 14 24	Stop times (min) include travexcept first stop (M:S) 80 70 60 50 40  5:00 4:40 4:00 3:40 3:40 7 sure  3:20 3:20 3:20 7 14 3:00 1 14 15 3:00 7 14 23 2:40 3 14 24 29	to First Stop (M:S)         Stop times (min) include travel time, except first stop           (M:S)         80         70         60         50         40         30           5:00         4:40         2         2         3:40         2         7         3:40         7         9 <t< td=""><td>Stop times (min) include travel time, except first stop (M:S) 80 70 60 50 40 30 20  5:00 4:40 4:00 3:40 3:40 7 9 20  sure  3:20 3:20 3:20 7 14 22 28 3:00 7 14 23 29 28 3:00 7 14 23 29 28 3:00 7 14 23 29 28 3:20 3 10 24 29 28 32</td><td>Stop times (min) include travel time, except first stop (M:S)  80  70  60  50  4:40  4:40  4:40  2  7  14  3:40  2  7  9  27  3:40  7  9  20  28  Sure  3:20  3  10  14  28  28  3:20  7  14  22  28  29  3:00  1  14  22  28  29  3:00  7  14  23  29  28  49  2:40  3  14  24  29  28  32  76</td><td>  Stop times (min) include travel time, except first stop (M:S)   80   70   60   50   40   30   20   10   (M:S)    </td></t<>	Stop times (min) include travel time, except first stop (M:S) 80 70 60 50 40 30 20  5:00 4:40 4:00 3:40 3:40 7 9 20  sure  3:20 3:20 3:20 7 14 22 28 3:00 7 14 23 29 28 3:00 7 14 23 29 28 3:00 7 14 23 29 28 3:20 3 10 24 29 28 32	Stop times (min) include travel time, except first stop (M:S)  80  70  60  50  4:40  4:40  4:40  2  7  14  3:40  2  7  9  27  3:40  7  9  20  28  Sure  3:20  3  10  14  28  28  3:20  7  14  22  28  29  3:00  1  14  22  28  29  3:00  7  14  23  29  28  49  2:40  3  14  24  29  28  32  76	Stop times (min) include travel time, except first stop (M:S)   80   70   60   50   40   30   20   10   (M:S)

#### **160 FSW**

Exceptional E	xposure									
10	5:20	·						0	5:20	
15	4:40						3	7	15:00	
20	4:20					6	8	17	35:40	
25	4:00				7	7	12	29	59:20	
30	3:40			6	7	12	23	28	80:00	
35	3:20		3	7	12	17	29	28	99:40	
40	3:20		5	13	14	25	29	35	124:40	
45	3:20		12	14	19	29	28	49	154:40	
50	3:00	4	15	14	28	28	29	65	186:20	

#### 170 FSW

Exceptional Ex	xposure										
9	5:40								0	5:40	
10	5:20								2	7:40	
15	4:40						2	6	7	20:00	
20	4:20					5	7	7	21	44:40	
25	4:00				6	7	7	17	28	69:20	
30	3:40			5	7	8	14	26	29	93:00	
35	3:20		2	7	9	14	21	28	35	119:40	
40	3:20		5	9	14	15	28	29	46	149:40	
45	3:20		8	15	14	24	28	29	65	186:40	
50	3:00	2	14	14	19	28	29	36	76	221:20	

# 0.75 ata ppO2 HeO2 Tables

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 at Constant Partial Pressure Oxygen in Helium.

	Time							DEC	COME	PRES	SION	STO	PS (	few)							Total
Bottom	to First					Stop	time				trav		•		first	stop					Ascent
Time (min)	Stop (M:S)	100	190	170	160	150	140	120	120	110	100	90	90	70	60	50	40	30	20	10	Time (M:S)
40 FS\		130	100	170	100	130	140	130	120	110	100	30	00	70	00	30	40	30	20	10	(141.3)
390	1:20																			0	1:20
000	1.20																			Ū	1.20
50 FS\	N																				
205	1:40																			0	1:40
210	1:20																			3	4:40
220	1:20																			9	10:40
230	1:20																			14	15:40
240	1:20																			20	21:40
250	1:20																			24	25:40
Exception		ıre																			00:40
260 270	1:20 1:20																			29	30:40
280	1:20																			33 37	34:40 38:40
290	1:20																			41	42:40
300	1:20																			45	46:40
310	1:20																			48	49:40
320	1:20																			52	53:40
330	1:20																			55	56:40
340	1:20																			58	59:40
350	1:20																			60	61:40
360	1:20																			63	64:40
370	1:20																			65	66:40
380	1:20																			68	69:40
390	1:20																			70	71:40
60 FS\	۸/																				
133	2:00																			0	2:00
140	1:40																			8	10:00
150	1:40																			20	22:00
160	1:40																			30	32:00
170	1:40																			40	42:00
Exception	al Exposu	ıre																			
180	1:40																			50	52:00
190	1:40																			59	61:00
200	1:40																			67	69:00
210	1:40																			75	77:00
220	1:40																			82	84:00
230	1:40																			90	92:00
240	1:40																			96	98:00
250 260	1:40 1:40																			<ul><li>103</li><li>109</li></ul>	105:00 111:00
270	1:40																		1	113	115:40
210	1.20																		1	113	113.40

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop							es (m	in) in	clude	SION e trav	el tin	ne, ex		first	stop					Total Ascen Time
(min)	(M:S)			170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
60 FSV	N Con	tinu	ıed																		
280	1:20																		7	113	121:40
290	1:20																		12	113	126:40
300	1:20																		16	114	131:40
310	1:20																		21	113	135:40
320	1:20																		25	113	139:40
330	1:20																		29	113	143:40
340	1:20																		33	113	147:40
350	1:20																		36	113	150:40
360	1:20																		40	113	154:40
370	1:20																		43	113	157:4
380	1:20																		46	113	160:4
390	1:20																		49	113	163:4
70 FSV																					
82	2:20																			0	2:2
85	2:00																			2	4:2
90	2:00																			6	8:2
95	2:00																			9	11:2
100	2:00																			12	14:2
110	2:00																			19	21:2
120	2:00																			35	37:20
130	2:00																			51	53:20
140	2:00																			65	67:20
Exception		re																			
150	2:00																			79	81:2
160	2:00																			92	94:2
170	2:00																		_	104	106:20
180	1:40																			109	118:0
190	1:40																			113	129:0
200	1:40																			113	139:0
210	1:40																			113	149:0
220	1:40																			113	158:00
230	1:40																			113	167:0
240	1:40																			113	175:0
250	1:40																			113	183:0
260	1:40																			113	190:0
270	1:40																		82	113	197:0

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time										SION										Total
Bottom Time	to First Stop							·	,		e trav			-	first	stop					Ascent Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
80 FS\	N																				
52	2:40																			0	2:40
55	2:20																			2	4:40
60	2:20																			5	7:40
65	2:20																			8	10:40
70	2:20																			14	16:40
75	2:20																			19	21:40
80	2:20																			24	26:40
85	2:20																			29	31:40
90	2:20																			33	35:40
95	2:20																		0	36	38:40
100	2:00																		3	44	49:20
110	2:00																		9	58	69:20
120	2:00																		14	73	89:20
Exception 130		ire																	10	07	107:20
140	2:00 2:00																		18	87 100	124:20
150	2:00																			105	140:20
160	2:00																			111	156:20
170	2:00																		55	113	170:20
180	2:00																		69	113	184:20
190	2:00																			113	197:20
100	2.00																		0_	110	107.20
90 FS\	N																				
37	3:00																			0	3:00
40	2:40																			4	7:00
45	2:40																			10	13:00
50	2:40																			15	18:00
55	2:40																			19	22:00
60	2:20																		1	23	26:40
65	2:20																		4	27	33:40
70	2:20																		6	32	40:40
75	2:20																		8	36	46:40
80	2:20																		12	38	52:40
85	2:20																		17	38	57:40
90	2:20																		22	44	68:40
95	2:20																		26	53	81:40
100	2:20																		30	61	93:40
110	2:20																		38	77	117:40
120	2:00																	6	38	94	140:20
Exception	al Exposu	re																			
130	2:00																	11			161:20
140	2:00																	15		109	181:20
150	2:00																	19		113	
160	2:00																	22	81	113	218:20

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First					Stor	time				SION trav				first	ston					Total Ascent
Time (min)	Stop (M:S)	190	180	170	160												40	30	20	10	Time (M:S)
100 FS	. ,	150	100	170	100	100	140	100	120	110	100	50	00	70	00	50	70	50	20	.0	(141.0)
29	3:20																			0	3:20
30	3:00																			1	4:20
35	3:00																			11	14:20
40	3:00																			19	22:20
50	2:40																		9	22	34:00
60	2:40																		18	27	48:00
70	2:20																	2	22	38	64:40
80	2:20																	7	31	41	81:40
90	2:20																	11	38	59	110:40
100	2:20																	21	38	78	139:40
Exception	al Exposu	re																			
110	2:20																	29	39	96	166:40
120	2:20																	36	50	103	191:40
130	2:00																4	38	61	111	216:20
140	2:00																9	38	76	113	238:20
110 FS	SW																				
23	3:40																			0	3:40
25	3:20																			2	5:40
30	3:20																			14	17:40
35	3:00																		3	22	28:20
40	3:00																		11	22	36:20
50	2:40																	3	22	22	50:00
60	2:40																	13	22	33	71:00
70	2:40																	20	28	37	88:00
80	2:20																3	23	37	55	120:40
90	2:20																7	31	38	76	154:40
100	2:20																11	38	39	96	186:40
Exception	al Exposu	re																			
110	2:20																20	38	52	103	215:40
120	2:20																28	38	64	111	243:40
130	2:20																34	40	80		269:40
140	2:00															2	38	51	89	113	295:20

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time							DF	COMI	PRFS	SION	STO	PS (	fsw)							Total
Bottom	to First					Stop	time				trav		•		first	stop					Ascent
Time (min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	Time (M:S)
120 FS		130	100	170	100	100	170	100	120	110	100	30	00	70	00	50	70	50	20	.0	(141.0)
18	4:00																			0	4.00
20	3:40																			2	4:00 6:00
25	3:40																			13	17:00
30	3:20																		5	22	30:40
35	3:20																		16	22	41:40
40	3:00																	4	22	22	51:20
50	3:00																	19	23	24	69:20
60	2:40																9	22	22	37	93:00
70	2:40																16	22	34	52	127:00
80	2:40																22	29	38	72	164:00
Exception		re																			104.00
90	2:20															4	24	37	38	95	200:40
100	2:20															7	32	38		104	233:40
110	2:20															12	37	38	65	112	266:40
120	2:20															20	38	41	83	113	297:40
130 FS	SW																				
15	4:20																			0	4:20
20	4:00																			8	12:20
25	3:40																		6	18	28:00
30	3:20																	2	16	22	43:40
35	3:20																	8	22	22	55:40
40	3:20																	19	22	22	66:40
50	3:00																14	22	22	28	89:20
60	2:40															4	22	22	26	48	125:00
70	2:40															12	22	24	38	70	169:00
Exception	al Exposu	ire																			
80	2:40															18	22	36	38	93	210:00
90	2:20														1	22	32	37	46	107	247:40
100	2:20														4	26	38	37	64	113	284:40
110	2:20														6	35	38	40	84	113	318:40
120	2:20														12	38	38	55	93	113	351:40

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop					Stop	time				SION trav		•	,	first	stop					Total Ascent Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
140 FS	SW	'																			
12	4:40																			0	4:40
15	4:20																			4	8:40
20	4:00																		5	12	21:20
25	3:40																	4	10	22	40:00
30	3:40																	10	20	22	56:00
35	3:20																4	18	22	22	69:40
40	3:20																12	22	22	22	81:40
50	3:00															8	22	22	22	35	112:20
60	3:00															21	22	22	31	66	165:20
70	2:40														9	22	22	29	38	93	216:00
Exception	nal Exposu	ıre																			
80	2:40														15	22	27	38	40	113	258:00
90	2:40														20	23	38	38	63	113	298:00
100	2:20													1	22	35	38	37	88	113	336:40
150 FS	SW																				
10	5:00																			0	5:00
15	4:20																		2	7	13:40
20	4:00																	2	10	15	31:20
25	3:40																2	9	15	22	52:00
30	3:40																7	14	22	22	69:00
35	3:20															3	11	22	22	22	83:40
40	3:20															6	21	22	22	22	96:40
45	3:20															15	22	22	22	33	117:40
50	3:00														2	23	22	22	22	56	150:20
55	3:00														10	22	22	22	27	74	180:20
60	3:00														16	22	23	22	35	88	209:20
Exception	nal Exposu	ıre																			
70	2:40													5	22	22	22	35	40	113	262:00
80	2:40													12	22	22	34	38	65	113	309:00
90	2:40													17	22	31	38	38	90	113	352:00

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First		,			Stop	time				SION e trav				first	stop					Total Ascent
Time (min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	Time (M:S)
155 FS	` ,	1																			()
9	5:10																			0	5:10
10	4:50																			1	6:10
15	4:30																		3	9	16:50
20	4:10																	5	10	17	36:30
25	3:50																5	9	17	22	57:10
30	3:30															2	9	17	22	22	75:50
35	3:30															6	15	22	22	22	90:50
40	3:30															12	22	22	22	22	103:50
45	3:10														3	20	22	22	22	44	136:30
50	3:10														10	23	22	22	22	68	170:30
55	3:10														18	22	22	22	30	84	201:30
60	2:50													3	22	22	22	22	38	100	232:10
Exception	nal Exposu	ire																			
70	2:50													14	22	22	22	38	52	113	286:10
80	2:50													21	22	22	38	37	77	113	333:10
90	2:30												5	22	22	35	38	37	103	113	377:50
160 FS	SW																				
9	5:20																			0	5:20
10	5:00																			2	7:20
15	4:20																	1	4	10	19:40
20	4:00																1	8	9	19	41:20
25	4:00																8	10	19	22	63:20
30	3:40															5	10	19	22	22	82:00
35	3:20														1	9	18	22	22	22	97:40
40	3:20														4	15	22	22	23	27	116:40
45	3:20														9	22	22	22	22	55	155:40
50	3:20														18	22	23	22	22	79	189:40
Exception	nal Exposu	ire																			
55	3:00													5	22	22	22	22	31	97	224:20
60	3:00													12	22	22	22	24	38	113	256:20
70	2:40												1	22	22	22	25	38	64	113	310:00
80	2:40												8	22	23	25	37	38	91	113	360:00
90	2:40												14	22	24	37	38	43	111	113	405:00

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First					Stop	time				SION trave		•	,	first	stop					Total Ascent
Time (min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	Time (M:S)
165 FS																					
8	5:30																			0	5:30
10	5:10																			3	8:30
15	4:30																	2	6	9	21:50
20	4:10															_	2	10	9	21	46:30
25	3:50															2	10	9	22	22	69:10
30	3:50														_	9	9	22	22	22	88:10
35	3:30														5	9	21	22	22	22	104:50
40	3:30													1	8	19	22	22	22	39	135:50
45 50	3:10 3:10													5	16 22	22	22 22	22	22 24	66 92	174:30
Exception		ıro												- 5						92	212:30
55	3:10													13	22	22	22	22	34	108	246:30
60	3:10													20	22	22	22	27		113	277:30
70	2:50												10	22	22	22	28	38		113	337:10
80	2:50												18	22	22	28	38		105		387:10
170 FS	w																				
8	5:40																			0	5:40
10	5:00																		1	3	9:20
15	4:40																	4	7	9	25:00
20	4:20																5	10	10	22	51:40
25	4:00															6	9	11	22	22	74:20
30	3:40														3	10	12	22	22	22	95:00
35	3:40														8	12	22	22	22	22	112:00
40	3:20													3	9	22	22	22	22	50	153:40
45	3:20													5	19	22	23	22	22	78	194:40
50	3:20													13	22	22	22	22	26	104	234:40
Exception	al Exposu	ire																			
55	3:20													21	23	22	22	22	42	113	268:40
60	3:00												7	22	22	22	22	29	62	113	302:20
70	3:00												19	22	22	22	31	38	92	113	362:20
80	2:40											5	22	22	22	32	38	43	113	113	413:00

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Time   Stop		Time							DE	COMI	PRES	SION	STO	PS (f	sw)							Total
Miss   190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10   Miss     175 FSW   7   5.50		to First					Stop	time								first	stop					Ascent
7 5:50  10 5:10  15 4:30  20 4:10  3 1 7 10 12 22 56:30  25 4:10  3 3:50  7 7 13 12 22 22 22 22 101:10  3 3:30  3 3:50  7 7 13 12 22 22 22 22 112:10  40 3:30  7 7 13 22 22 22 22 21 12:10  Exceptional Exposure  45 3:30  10 22 12 22 22 22 22 11 12:50  50 3:10  8 22 12 22 22 22 23 01 13:25  50 3:10  8 22 12 22 22 22 30 113 25:30  60 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 22 23 01 13:35  65 3:10  8 22 22 22 22 22 23 01 13:35  65 3:10  10 22 22 22 22 22 23 01 13:35  65 3:10  10 22 22 22 22 22 23 01 13:35  65 3:10  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  10 5:20  20 4:40  20 4:20  3 8 10 11 22 22 22 23 108:00  35 3:40  37 9 17 22 22 22 22 21 108:00  35 3:40  37 9 17 22 22 22 22 21 108:00  35 3:40  37 9 17 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 23 108:00  35 3:40  37 9 17 10 10 10 22 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 23 108:00  35 3:40  37 9 17 10 10 10 10 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 27 37 191:40  Exceptional Exposure  45 3:20  4 110 10 16 22 22 22 22 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 22 22 22 23 108:00  35 3:40  37 9 17 12 22 22 22 22 22 22 22 22 23 108:00  35 3:40  36 3:20  37 9 17 13 122 22 22 22 22 22 22 23 108:00  37 22 22 22 22 22 23 108:00  38 3:20  29 20 22 22 22 22 23 108:00  30 3:40  30 3:40  30 3:40  30 3:40  30 3:40  30 3:40  30 3:40  30 3:40			190	180	170	160	150	140	130	120	110	100	an	80	70	60	50	40	30	20	10	
7       5:50       5:50       0       5:10       2       4       11:30       15       4:30       1       4       8       10       2:7:50       2.0       4:10       1       1       4       8       10       2:7:50       2.0       4:10       1       7       10       12       2:2       56:30       2.5       4:10       9       9       9       14       2:2       2:80:30       30       3:50       7       7       9       15       2:2       2:2       2:2       10:10:10       35       3:30       3       9       15       2:2       2:2       2:2       10:11:10       35       3:30       3       9       15       2:2       2:2       2:2       17:55:50       55       55       3:10       2       19       2:2       2:2       2:2       10:17:50       17:50       2       12       2:2       2:2       2:2       2:2       10:17:50       17:50       18       2:2       2:2       2:2       2:2       10:17:50       17:50       18       2:2       2:2       2:2       2:2       2:2       10:17:50       18       10:15       10:15       10:15       10:15       10:15       10:15	` '	` '	130	100	170	100	100	170	100	120	110	100	30	00	10	00	50	40	50	20	.0	(141.0)
10   5:10     2   4   11:30     1   4   8   10   27:50   20   4:10     1   7   10   12   22   56:30   25   4:10     9   9   14   22   22   80:30   3:50   7   9   15   22   22   22   10:110   35   3:30   7   13   22   22   22   22   30   11:70   3:50   3:30   7   13   22   22   22   22   30   11:70   3:50   3:30   7   13   22   22   22   22   22   31   127:50   40   3:30   7   13   22   22   22   22   22   22   20   11:10   22   22   22   22   22   22   20   11:10   22   22   22   22   22   22   22																					0	E-E0
15																				2		
1																		1	1			
25																	1					
30   3:50																						
35   3.30   3   9   15   22   22   22   31   127:50																7						
No.   No.															3	-						
Exceptional Exposure																-						
50       3:10       2       19       22       22       22       22       22       20       22       23       37       38       10       11       388:10       75       2:50       10       22       22       22       30       38       58       113       113       38:10       10       14       11       10       20       22       22       30       38       11       11       11       11       11       12       22       22       38       11       11       12       22       22       23       11       12       23 <td>Exception</td> <td>ial Exposu</td> <td>re</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Exception	ial Exposu	re																			
55       3:10       8       22       22       22       22       25       8 13       292:30         60       3:10       16       22       22       22       22       22       21       23       31       76       113       327:30         65       3:10       22       22       22       22       22       22       22       23       8       90       113       357:30         70       2:50       6       22       22       22       22       34       38       106       113       388:10         75       2:50       10       22       22       23       27       37       45       113       113       415:10         80       2:50       14       22       22       22       36       38       58       113       113       41:10         180 FSW         7       6:00       2       22       22       36       38       58       113       113       44:110         180 FSW         7       6:00       2       22       23       34       9       11       32       4       12:40       <	45	3:30													10	22	22	22	22	22	91	214:50
60       3:10       16       22       22       22       22       31       76       113       327:30         65       3:10       22       22       22       22       22       22       22       22       22       38       90       113       357:30         70       2:50       10       22       22       22       22       34       38       106       113       388:10         80       2:50       10       22       22       22       23       27       37       45       113       113       41:10         180 FSW         7       6:00       3       58       113       113       44:10         10       5:20       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       23       108:00         35       3:40       7       9       17       22 <t< td=""><td>50</td><td>3:10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>19</td><td>22</td><td>22</td><td>22</td><td>22</td><td>30</td><td>113</td><td>255:30</td></t<>	50	3:10												2	19	22	22	22	22	30	113	255:30
65       3:10       22       22       22       22       22       23       38       90       113       357:30         70       2:50       6       22       22       22       22       24       38       106       113       388:10         75       2:50       10       22       22       22       23       27       37       45       113       113       415:10         180 FSW         7       6:00       3       4       25       22       22       23       38       58       113       113       441:10         10       5:20       3       4       9       11       32:00         15       4:40       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       28:20       30       108:00         35       3:40       7       9       17       22       22       22       23       108:00         40       3:20       1       10 </td <td>55</td> <td>3:10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td>22</td> <td>22</td> <td>22</td> <td>22</td> <td>22</td> <td>58</td> <td>113</td> <td>292:30</td>	55	3:10												8	22	22	22	22	22	58	113	292:30
70       2:50       6       22       22       22       23       34       38       106       113       388:10         75       2:50       10       22       22       23       27       37       45       113       113       415:10         80       2:50       14       22       22       22       26       36       38       58       113       113       441:10         180 FSW         7       6:00       3       4       9       11       33       4       9       11       32:00       3       4       12:40       15       4:40       3       4       9       11       32:00       20       4:20       3       8       10       14       22       61:40       25       4:00       3       8       10       14       22       61:40       25       4:00       3       9       10       16       22       22       28       22       86:20       30       3:40       1       10       9       17       22       22       23       108:00       3       3       4       14       15:00       4       14       10       16	60	3:10												16	22	22	22	22	31	76	113	327:30
75       2:50       10       22       22       23       27       37       45       113       113       415:10         80       2:50       14       22       22       22       22       36       38       58       113       113       415:10         180 FSW         7       6:00       3       3       4       9       11       32:00         10       5:20       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       22       23       108:00         35       3:40       7       9       17       22       22       22       23       11:40         Exceptional Exposure       4       14       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       <	65	3:10												22	22	22	22	25	38	90	113	357:30
180 FSW         7       6:00       8       8       9       11       12:40         15       4:40       3       4       9       11       32:00         20       4:20       3       8       10       14       22       6:20         30       3:40       3       9       10       16       22       22       28       6:20         30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       22       23       108:00         40       3:20       1       10       16       22       22       22       23       108:00         40       3:20       1       10       16       22       22       22       23       11:40         Exceptional Exposure       4       14       22 </td <td>70</td> <td>2:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td>22</td> <td>22</td> <td>22</td> <td>22</td> <td>34</td> <td>38</td> <td>106</td> <td>113</td> <td>388:10</td>	70	2:50											6	22	22	22	22	34	38	106	113	388:10
180 FSW         7       6:00       0       6:00         10       5:20       3       4       12:40         15       4:40       3       8       10       14       22       61:40         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       22       22       24       14       145:00         40       3:20       1       10       16       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22 </td <td>75</td> <td>2:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10</td> <td>22</td> <td>22</td> <td>23</td> <td>27</td> <td>37</td> <td>45</td> <td>113</td> <td>113</td> <td>415:10</td>	75	2:50											10	22	22	23	27	37	45	113	113	415:10
7       6:00       0       6:00         10       5:20       3       4       12:40         15       4:40       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       22       23       108:00         35       3:40       7       9       17       22       22       22       21       41       145:00         40       3:20       1       10       16       22       22       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22       22       22       22       22       22       22       24       41       13       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3	80	2:50											14	22	22	22	36	38	58	113	113	441:10
7       6:00       0       6:00         10       5:20       3       4       12:40         15       4:40       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       22       23       108:00         35       3:40       7       9       17       22       22       22       21       41       145:00         40       3:20       1       10       16       22       22       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22       22       22       22       22       22       22       24       41       13       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3																						
10 5:20	180 FS	SW																				
15       4:40       3       4       9       11       32:00         20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       286:20         30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       23       22       41       145:00         40       3:20       1       10       16       22       22       22       22       73       191:40         Exceptional Exposure —         45       3:20       4       14       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       24       41       13       277:40         55       3:20       7       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       22       23	7	6:00																			0	6:00
20       4:20       3       8       10       14       22       61:40         25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       22       22       21       41       145:00         40       3:20       1       10       16       22       22       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       22       24       41       13       277:40         50       3:20       7       22       22       22       22       24       70       113       314:40         55       3:20       8       16       22       22       22       22       24       70       113       314:40	10	5:20																		3	4	12:40
25       4:00       3       9       10       16       22       22       86:20         30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       23       22       41       145:00         40       3:20       1       10       16       22       24       4       11       20       23       22<		4:40																3	4	9	11	32:00
30       3:40       1       10       9       17       22       22       23       108:00         35       3:40       7       9       17       22       23       22       41       145:00         40       3:20       1       10       16       22       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22       22       22       22       22       105       236:40         50       3:20       7       22       22       22       22       22       24       41       113       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       23       30       90       113       352:20																						
35       3:40       7       9       17       22       23       22       41       145:00         40       3:20       1       10       16       22       22       22       22       73       191:40         Exceptional Exposure         45       3:20       4       14       22       22       22       22       22       105       236:40         50       3:20       7       22       22       22       22       22       24       4       113       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       23       30       90       113       352:20																						
40     3:20     1     10     16     22     22     22     22     73     191:40       Exceptional Exposure ————————————————————————————————————																						
Exceptional Exposure ————————————————————————————————————																						
45       3:20       4       14       22       22       22       22       22       105       236:40         50       3:20       7       22       22       22       22       22       24       4       113       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       22       33       90       113       352:20														1	10	16	22		22	22	73	191:40
50       3:20       7       22       22       22       22       22       24       113       277:40         55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       23       39       113       352:20		·	ire												4.4	22			22		405	220:40
55       3:20       16       22       22       22       22       24       70       113       314:40         60       3:00       3       22       22       22       22       22       23       30       90       113       352:20																						
60 3:00 3 22 22 22 22 23 30 90 113 352:20														-								
													3									
5																						
70 3:00 15 22 22 22 22 37 45 113 113 414:20																						

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop					Stop	time				SION e trav				first	stop					Total Ascent Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
185 FS	SW	1																		'	
6	6:10																			0	6:10
10	5:30																		4	4	13:50
15	4:50																4	5	10	12	36:10
20	4:10														1	4	10	9	16	22	66:30
25	4:10														6	10	9	19	22	22	92:30
30	3:50													5	9	10	20	22	22	22	114:10
35	3:30												1	10	9	21	22	22	22	52	162:50
40	3:30												5	10	19	22	22	22	22	86	211:50
Exception	al Exposu	re																			
45	3:30												8	18	22	22	22	22	28	113	258:50
50	3:10											1	14	22	22	22	22	22	58	113	299:30
55	3:10											3	22	22	22	22	22	26	84	113	339:30
60	3:10											11	22	22	22	22	22	36	103	113	376:30
65	3:10											18	22	22	22	22	30	44	113	113	409:30
70	2:50										2	22	22	22	22	24	38	60	113	113	441:10
190 FS	SW																				
6	6:20																			0	6:20
10	5:20																	1	4	5	15:40
15	4:40															2	4	6	9	15	41:00
20	4:20														2	6	10	9	18	22	71:40
25	4:00													1	9	9	10	20	23	22	98:20
30	4:00													8	10	10	22	22	22	27	125:20
35	3:40												5	9	11	22	22	22	22	63	180:00
40	3:40												9	11	22	22	22	22	22	99	233:00
Exception	al Exposu	re																			
45	3:20											3	9	22	22	22	22	22	41	113	279:40
50	3:20											5	18	22	22	22	22	22	73	113	322:40
55	3:20											11	22	22	22	22	22	28	99	113	364:40
60	3:20											20	22	22	22	22	22	42	114	113	402:40
65	3:00										5	22	22	22	22	22	33	59	113	113	436:20
70	3:00										11	22	22	22	22	27	38	76	113	113	469:20

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time							DE	СОМІ	PRES	SION	STO	PS (f	sw)							Total
Bottom Time	to First Stop					Stop	time	es (m	in) in	clude	trav	el tim	e, ex	cept	first	stop					Ascent Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
195 FS	SW	'																		'	, ,
6	6:30																			0	6:30
10	5:30																	3	3	6	17:50
15	4:50															3	4	8	9	16	45:10
20	4:30														4	7	10	9	20	22	76:50
25	4:10													4	9	10	10	22	22	22	103:30
30	3:50												3	9	10	12	22	23	22	37	142:10
35	3:50												9	9	14	22	22	22	22	75	199:10
40	3:30											4	9	14	22	22	22	22	22	112	252:50
Exception	al Exposu	ıre																			
45	3:30											7	12	22	22	22	22	22	55	113	300:50
50	3:30											9	22	22	22	22	22	22	88	113	345:50
55	3:10										1	19	22	22	22	22	22	30	113	113	389:30
60	3:10										6	22	22	22	22	22	26	55	113	113	426:30
200 FS	SW																				
6	6:40																			0	6:40
10	5:40																	4	4	6	20:00
15	4:40														1	4	4	8	10	17	49:00
20	4:20													2	4	9	9	9	22	22	81:40
25	4:20													7	10	9	13	22	22	22	109:40
30	4:00												6	10	9	16	22	22	22	48	159:20
35	3:40	1										3	10	9	17	22	_22_	22	_22	87	218:00
	al Exposu	ıre																			
40	3:40											7	10	17	22	22	22	22	34	113	273:00
45	3:20										1	10	16	22	22	22	22	22	70	113	323:40
50	3:20										4	14	22	22	22	22	22		106	113	372:40
55 60	3:20 3:20										6	22	22 22	22	22 22	22	22 27		113 113	113	413:40
60	3.20										15	22	22	22	22	22	21	12	113	114	454:40
205 50	214/																				
205 FS																					0.50
5	6:50																			0	6:50
10	5:30														0	4	1	4	4	8	22:50
15	4:50													2	2	4	5	9	9	19	53:10
20	4:30												2	3	5	9	10	11	22	22	86:50
25 30	4:10 3:50											1	2 9	9	9	10 18	15 22	22 22	22 22	22 59	115:30 176:10
35	3:50											7	9	10	20	22	22	22		100	238:10
	3:50 eptional E	vnosii	ro									1	9	10	20	22	22	22	22	100	230.10
40	epuonai ⊑. 3:30	vhosn	ı C								2	10	9	21	 22	 22	22	22		113	294:50
45	3:30										5	10	20	22	22	22	22	22		113	346:50
50	3:30										8	18	22	22	22	22	22		113		395:50
55	3:30										14	22	22	22	22	22	22		113		437:50
60	3:10									2	22	22	22	22	22	22	30		113		480:30

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop					Stop	time				SION trav		•	,	first	stop					Tota Ascer
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S
210 FS	SW	1																			·
5	7:00																			0	7:0
10	5:40																2	4	4	9	25:0
15	5:00														4	3	6	10	9	20	57:2
20	4:20												1	4	6	10	9	13	22	22	91:4
25	4:20												5	9	9	10	17	22	22	26	124:4
30	4:00											4	10	9	9	21	22	23	22	68	192:2
35	3:40										1	10	9	11	22	22	22	22	22	112	257:0
Exception	al Exposu	re																			
40	3:40										6	9	12	22	22	22	22	22	61	113	315:0
45	3:40										9	11	22	23	22	22	22	22	100	113	370:0
50	3:20									2	10	22	22	22	22	22	22	45	113	113	418:
55	3:20									4	19	22	22	22	22	22	22	81	113	113	465:
60	3:20									10	22	22	22	22	22	22	32	103	113	113	506:
215 FS	SW																				
5	7:10																			0	7:
10	5:50																3	4	4	10	27:
15	4:50													1	4	4	7	9	10	22	62:
20	4:30												2	4	8	10	9	15	22	22	96:
25	4:10											1	7	10	9	9	20	22	22	36	140:
30	4:10											8	9	10	11	22	22	22	22	81	211:
Exception	al Exposu	ire																			
35	3:50										5	10	9	14	22	22	22	22	35	113	278:
40	3:30									1	9	10	15	22	22	22	22	22	77	113	338:
45	3:30									4	9	15	22	22	22	23	22	24	113	113	392:
50	3:30									6	14	22	22	22	22	22	22	62	113	114	444:
55	3:30									9	22	22	22	22	22	22	23	97	113	113	490:
60	3:30									19	22	22	22	22	22	22	41	112	113	113	533:
220 FS	SW																				
5	7:20																			0	7:
10	5:40															1	4	4	5	9	29:
15	5:00													3	3	4	9	9	11	22	66:
20	4:40												4	4	9	10	9	17	22	22	102:
25	4:20											3	8	10	9	10	22	22	22	45	155:
30	4:00										2	10	9	9	14	22	22	22	22	93	229:
	al Exposu	re																			
35	4:00										9	9	10	17	22	22	22	22		113	298:
40	3:40									5	9	9	19	22	22	22	22	22	92	113	361:
45	3:40									8	9	19	22	22	22	22	22	41	113	113	417:
50	3:20								1	10	17	22	22	22	22	22	22	80	113	113	469:
55	3:20								3	15	22	22	22	22	22	22	30	108	113	113	517:

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First Stop					Stop	o time	DE( es (m			SION trav		•	,	first	stop					Total Ascen Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
225 FS	SW																				
4	7:30																			0	7:30
5	7:10																			1	8:30
10	5:50															2	4	4	6	9	31:10
15	5:10													4	4	4	9	10	12	22	70:30
20	4:30											2	4	5	10	9	9	19	22	22	106:50
25	4:10										1	5	9	9	10	12	22	22	22	56	172:3
30	4:10										6	9	9	10	16	22	22	23	22	104	247:3
Exception	al Exposu	ıre																			
35	3:50									3	10	9	10	20	22	22	22	22	61	113	318:1
40	3:50									8	10	9	22	22	22	22	22	22	106	113	382:1
45	3:30								3	9	10	22	22	22	22	22	22	56	113	113	439:5
50	3:30								5	10	21	22	22	22	22	22	22	97	113	113	494:5
55	3:30								7	19	22	22	22	22	22	22	42	113	113	114	543:5
230 FS	SW																				
4	7:40																			0	7:4
5	7:20																			2	9:4
10	6:00															3	4	4	7	9	33:2
15	5:00												2	4	3	6	9	9	14	22	74:2
20	4:40											3	4	7	9	10	9	21	22	22	112:0
25	4:20										2	7	9	10	9	14	22	22	22	66	187:4
30	4:20										9	10	9	9	20	22	22	22	26	113	266:4
Exception	al Exposu	ire																			
35	4:00									7	9	10	10	22	22	22	22	22	74	113	337:2
40	3:40								3	9	10	13	22	22	22	22	22	31	113	113	406:0
45	3:40								7	9	14	22	22	22	22	22	22	74	113	113	466:0
50	3:40								9	13	22	22	22	22	22	22	27	109	113	113	520:0
55	3:20							2	10	22	22	22	23	22	22	22	60	113	113	113	569:4
235 FS	SW																				
4	7:50																			0	7:5
5	7:30																			3	10:5
10	5:50														1	4	3	4	8	10	36:1
15	5:10												3	4	4	6	10	9	15	22	78:3
20	4:30										1	4	4	8	10	9	10	22	22	22	116:5
25	4:30										4	8	9	10	9	17	22	22	22	76	203:5
30	4:10									4	9	9	10	9	22	22	22	22	38	113	284:3
Exception	al Exposu	re																			
35	3:50								2	9	9	10	13	22	22	23	22	22		113	359:1
40	3:50								7	9	10	16	22	22	22	22	22	46	113	113	428:1
45	3:30							1	10	9	17	23	22	22	22	22	22	90	113	113	489:5
50	3:30							4	9	17	22	22	22	22	22	22	40	113	113	113	544:5

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First					Stop	time				SION e trav		•	,	first	stop					Total Ascent Time
Time (min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
240 FS	SW	1																		'	
4	8:00																			0	8:00
5	7:40																			3	11:00
10	6:00														2	4	4	3	9	10	38:20
15	5:00											1	4	4	3	8	9	10	17	22	83:20
20	4:40										3	3	5	9	10	9	12	22	22	32	132:00
25	4:20									2	4	10	9	9	10	19	22	22	22	87	220:40
Exception	ıal Exposu	ıre																			
30	4:20									7	9	10	9	12	22	22	22	22	51	113	303:40
35	4:00								5	10	9	10	16	22	22	22	22	22	104	113	381:20
40	3:40							1	10	9	10	19	22	22	22	22	22	60	113	113	449:00
45	3:40							5	10	9	21	22	22	22	22	22	22	107	113	113	514:00
50	3:40							8	9	21	22	22	22	22	22	22	58	113	113	113	571:00
245 FS	SW																				
5	7:30																		1	4	12:50
10	6:10														3	4	4	4	9	11	41:30
15	5:10											2	4	4	4	9	9	9	19	22	87:30
20	4:50										4	4	6	9	10	9	14	22	22	41	146:10
25	4:30									3	6	10	9	10	9	21	22	22	22	98	236:50
Exception		ıre																			
30	4:10								1	10	9	10	9	15	22	22	22	22	64	113	323:30
35	4:10								9	9	10	9	20	22	22	22	22	27		113	402:30
40	3:50							5	10	9	11	22	22	22	22	22	22	77		113	475:10
45	3:50							9	10	12	22	22	22	22	22	22	33		113		539:10
50	3:30						3	9	12	22	22	22	22	22	23	22	75	113	114	113	597:50
250 FS	SW																				
5	7:40																		1	4	13:00
10	6:20														4	4	4	5	9	12	44:40
15	5:20											3	4	4	5	9	9	10	20	22	91:40
20	4:40									2	4	4	7	9	10	9	16	22	22	50	160:00
25	4:20								1	4	8	9	10	9	11	22	22	22	22	110	254:40
Exception	al Exposu	ire																			
30	4:20								5	9	10	9	10	17	22	22	22	22	78	113	343:40
35	4:00							4	9	9	10	10	22	22	22	22	22	41	113	114	424:20
40	4:00							9	9	10	14	22	22	22	22	22	22	94	113	113	498:20
45	3:40						4	9	10	16	22	22	22	22	22	22	51	113	113	113	565:00
50	3:40						7	9	16	22	22	22	22	22	22	22	95	113	113	113	624:00

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom	Time to First		DECOMPRESSION STOPS (fsw) Stop times (min) include travel time, except first stop															Total Ascent			
Time (min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	Time (M:S)
255 FS	` '	.00												. •				•		. •	(
5	7:50																		2	4	14:10
10	6:10													1	4	4	4	6	10	12	47:30
15	5:10										1	4	4	4	5	10	9	10	22	22	96:30
20	4:50									3	4	4	9	9	10	9	18	22	22	59	174:10
25	4:30								3	4	9	10	9	10	13	22	22	22	31	113	272:50
	nal Exposu	re																			
30	4:10							1	8	9	10	9	9	21	22	22	22	22	91	113	363:30
35	4:10							7	10	9	9	14	22	22	22	22	22	56	113	113	445:30
40	3:50						4	9	10	9	17	22	22	22	22	22	25	107	113	113	521:10
45	3:50						8	9	10	19	22	22	22	22	22	22	68	113	113	113	589:10
50	3:30					2	9	10	20	22	22	22	22	22	22	32	104	113	113	113	651:50
260 F	SW																				
5	8:00																		3	4	15:20
10	6:20													2	4	4	4	7	10	14	51:40
15	5:20										2	4	4	4	7	9	10	11	22	22	100:40
20	4:40								1	4	4	5	9	10	9	9	20	22	22	69	189:00
25	4:20							1	4	5	10	9	10	9	16	22	22	22	43	113	290:40
	nal Exposu	re																			
30	4:20							3	9	10	9	9	11	22	22	22	22	22	105	113	383:40
35	4:00						2	9	10	9	9	17	22	22	22	22	22	72	113		468:20
40	4:00						8	9	9	10	20	22	22	23	22	22	34		113	113	544:20
45	3:40					3	9	9	11	22	22	22	22	22	22	22	86	113	113	113	615:00
265 F	sw																				
5	8:10																		4	4	16:30
10	6:30													4	3	4	4	8	10	15	54:50
15	5:30										4	4	3	4	9	9	9	13	22	22	104:50
20	4:50								3	4	3	7	9	10	9	9	22	22	22	78	203:10
25	4:30							2	4	8	9	10	9	9	18	22	22	22	55	113	307:50
	nal Exposu	re																			
30	4:30							6	10	9	9	10	13	22	22	22	22	27	113	113	402:50
35	4:10					_	5	10	9	10	9	19	22	23	22	22	22	87	113		490:30
40	3:50					2	10	9	10	11	22	22	22	22	22	22		113		113	569:10
45	3:50					7	9	9	15	22	22	22	22	22	22	26	100	113	113	113	641:10

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

Bottom Time	Time to First					Stop	time	DE0			SION trav		•	,	first	stop					Total Ascent Time
(min)	Stop (M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
270 FS	SW	1																			
5	8:00																	1	4	4	17:20
10	6:20												1	4	4	4	4	9	9	16	57:40
15	5:20									1	4	4	4	4	9	10	9	15	22	22	109:40
20	5:00								4	4	4	8	9	9	10	11	22	22	22	88	218:20
25	4:40							4	4	9	9	10	9	10	20	22	22	22	66	113	325:00
Exception	nal Exposu	re																			
30	4:20						2	8	9	10	9	10	16	22	22	22	22	41	113	113	423:40
35	4:20						9	9	10	9	10	22	22	22	22	22	22	102	113	113	511:40
40	4:00					6	9	10	9	15	22	22	22	22	22	22	69	113		113	593:20
45	3:40				1	10	9	10	18	22	22	22	22	22	22	37	107	113	113	113	667:00
275 F	SW																				
5	8:10																	2	4	4	18:30
10	6:30												2	4	4	4	4	10	9	18	61:50
15	5:30									3	4	3	4	5	10	9	10	16	22	24	115:50
20	4:50							2	4	4	4	9	9	10	9	14	22	22	22	99	235:10
	nal Exposu	re																			
25	4:30						2	4	5	9	10	9	10	10	22	22	22	22	79	113	343:50
30	4:30						4	9	10	9	10	9	19	22	22	22	22	55	113		443:50
35	4:10					4	9	9	10	9	13	22	22	22	22	22	32			113	534:30
40	3:50				1	9	10	9	9	19	22	22	22	22	22	22	86	113		114	619:10
45	3:50				5	10	9	9	22	22	22	22	22	22	22	48	113	113	113	113	691:10
280 FS																					
5	8:20																	3	4	3	18:40
10	6:40									_	_		3	4	4	4	5	10	9	19	65:00
15	5:40									4	4	4	4	6	9	10	9	18	22	32	128:00
20	5:00							3	4	4	5	10	9	10	9	15	23	22	22	109	250:20
	nal Exposu	re								40		40		40						440	000.00
25	4:40					0	3	4	7	10	9	10	9	12	22	22	22	22		113	362:00
30	4:20					2	6	9	10	9	10	9	21	22	22	22	22	70	113		464:40
35	4:20				4	7	10	9	9	10	16 22	22	22	22	22	22	43		113		557:40
40	4:00				4	10	9	10	9	22				22	22	26	99	113	113	113	642:20
45	4:00				9	9	10	13	22	22	22	22	22	22	22	68	113	113	113	113	719:20

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time o							DE/	2014	DE0		CTO	DC /6								Total
Bottom	Time to First					Stor	time				SION trav		•	,	first	stop					Total Ascent
Time	Stop					·		•	•					·		·					Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
285 FS	SW																				
5	8:30																	3	4	4	19:50
10	6:30											1	4	4	3	4	7	9	10	20	68:50
15	5:30								2	4	4	3	4	8	9	10	9	21	22	40	141:50
20	4:50						1	4	4	4	7	9	9	10	9	18	22	22	29	113	266:10
Exception	nal Exposu	ıre																			
25	4:30					1	4	4	9	9	10	9	10	14	22	22	22	23	104	113	380:50
30	4:30					3	8	10	9	10	9	11	22	22	22	22	22	84	113	113	484:50
35	4:10				2	9	10	9	9	10	19	22	22	22	22	22	59	113	113	113	580:30
40	4:10				8	10	9	10	12	22	22	22	22	22	22	38	104	113	113	113	666:30
45	3:50			4	9	10	9	17	22	22	22	22	22	22	22	87	113	113	113	113	746:10
290 FS	SW																				
5	8:20																1	4	3	5	21:40
10	6:40											2	4	4	4	3	8	9	10	22	73:00
15	5:40								3	4	4	4	4	8	10	9	10	22	22	48	154:00
20	5:00						3	4	3	4	9	9	9	10	9	20	22	22	40	113	282:20
Exception	nal Exposu	ıre																			
25	4:40					3	4	5	9	9	10	9	10	17	22	22	22	31	109	113	400:00
30	4:20				1	5	9	10	9	9	10	14	22	22	22	22	23	99	113	113	507:40
35	4:20				5	10	9	10	9	10	22	22	22	22	22	22	76	113	113	113	604:40
40	4:00			3	9	10	9	10	15	22	23	22	22	22	22	49	111	113	113	113	692:20
45	4:00			8	9	10	9	20	22	22	22	22	22	22	31	95	113	113	113	113	770:20
295 FS	SW																				
5	8:30																1	4	4	5	22:50
10	6:50											3	4	4	4	3	9	9	11	22	76:10
15	5:30							1	4	4	3	4	5	9	10	9	12	22	22	56	166:50
20	4:50					1	3	4	4	4	10	9	10	9	10	22	22	22	50	113	298:10
Exception	nal Exposu	ire																			
25	4:30				1	4	4	6	10	9	9	10	9	20	22	22	22	41	112	113	418:50
30	4:30				3	6	10	9	9	10	9	17	22	22	22	22	33	103	113	113	527:50
35	4:30				9	9	10	9	10	12	22	22	22	22	22	23	91	113	113	113	626:50
40	4:10			7	9	10	9	9	20	22	22	22	22	22	22	66	113	113	113	113	718:30
45	3:50		2	10	9	10	11	22	22	22	22	22	22	22	43	102	113	113	113	113	797:10

**Table 15-17.** Closed-Circuit Mixed-Gas UBA Decompression Table Using 0.75 ata Constant Partial Pressure Oxygen in Helium (Continued).

(DESCENT RATE 60 FPM—ASCENT RATE 30 FPM)

	Time										SION		•	,	_						Total
Bottom Time	to First Stop					Stop	time	es (mi	in) in	clude	trav	el tim	ie, ex	cept	first	stop					Ascent Time
(min)	(M:S)	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	(M:S)
300 F	SW																				
5	8:40																2	4	4	6	25:00
10	7:00											4	4	4	4	4	9	9	12	22	79:20
15	5:40							2	4	4	4	4	5	10	9	10	14	22	22	64	180:00
20	5:00					2	4	4	4	5	10	9	10	9	12	22	22	22	62	113	315:20
Exception	al Exposu	re																			
25	4:40				2	4	4	8	10	9	10	9	9	22	22	23	22	51	113	113	436:00
30	4:20			1	4	8	9	10	9	10	9	20	22	22	22	22	43	108	113	113	549:40
35	4:20			4	9	9	10	9	10	15	22	22	22	22	23	32	97	113	113	113	649:4
40	4:00		1	10	9	10	9	10	22	22	22	22	22	22	22	83	113	113	113	113	742:2
310 FS	2///																				
	al Exposu	ro																			
6	8:20	ie													1	4	4	4	6	9	36:4
10	7:00										2	4	4	4	4	6	9	10	15	22	87:2
15	5:40						1	4	4	4	4	4	8	9	9	10	18	22	22	81	206:0
20	5:00				1	4	4	4	4	8	10	9	10	9	17	22	22	22	85	113	349:2
25	4:40			2	4	3	7	9	10	9	9	10	14	22	22	22	22	81		113	477:0
30	4:40			4	6	10	9	10	9	10	12	22	22	22	22	22	69	113		113	593:0
35	4:20		2	9	10	9	9	10	9	22	22	22	22	22	22	54	109	113		113	696:4
40	4:20		9	9	10	9	10	16	22	22	22	22	23	22	41	98	113		113		791:4
320 FS	SW																				
Exception	al Exposu	re																			
6	8:40														3	4	4	4	7	10	41:00
10	7:00									1	4	4	4	4	4	7	10	9	19	22	95:20
15	6:00						4	3	4	4	4	5	10	9	9	10	22	22	22	98	232:20
20	5:20				4	4	4	4	6	9	10	9	9	10	22	22	22	28	102	113	383:4
25	4:40		1	4	4	4	9	10	9	10	9	10	19	22	22	22	34	96	113	113	516:0
30	4:40		3	5	10	9	9	10	9	10	18	22	22	22	22	31	91	113	113	113	637:0
35	4:20	1	8	10	9	10	9	9	16	22	22	22	22	22	24	84	113	113	113	113	746:4