

M. A. Miller

Son & Avery
RECORD

7530-00-222-3525
FEDERAL SUPPLY SERVICE
(GPO)

Here is the list which is published in the Navy sonobuoy manual with the asterisked channels prohibited as noted.

Channel	Freq.	Channel	Freq.	Channel	Freq.
1 *	162.250	34	136.750	67	149.125
2	163.000	35	137.875	68	149.500
3	163.750	36	137.500	69	149.875
4 *	164.500	37	137.875	70	150.250
5 *	165.250	38	138.250	71	150.625
6	166.000	39	138.625	72	151.000
7	166.750	40	139.000	73	151.375
8	167.500	41	139.375	74	151.750
9	168.250	42	139.750	75	152.125
10	169.000	43	140.125	76	152.500
11	169.750	44	140.500	77	152.875
12 *	170.500	45	140.875	78	153.250
13	171.250	46	141.250	79	153.625
14	172.000	47	141.625	80	154.000
15	172.750	48	142.000	81	154.375
16	173.500	49	142.375	82	159.750
17 *	162.625	50	142.750	83	155.125
18	163.375	51	143.125	84	155.500
19 *	164.125	52	143.500	85	158.875
20	164.875	53	143.875	86	156.250
21	165.625	54	144.250	87	159.250
22	166.375	55	144.625	88	157.000
23	167.125	60	146.500	89	157.375
24	167.875	61	146.875	90	157.750
25 *	168.625	56	147.250	91	158.125
26	169.375	59	147.625	92	158.500
27	170.125	60	148.000	93	158.875
28	170.875	61	148.375	94	159.250
29	171.625	62	148.750	95	159.625
30	172.375	63	149.000	96	160.000
31	173.125	64	149.375	97	160.375
32	136.000	65	149.750	98	160.750
33	136.375	66	149.750	99	161.125

Ship freq. Used: 157.125 m. 075

Jay Barlow (619) 546-7178
jbarlow@ucsd.edu

* These channels prohibited within 200 miles off the coast

Sono- buoy #	Type	Chan#	Depth	Date	Time	Tape#	Sight#	Species	Latitude			N	Longitude	E	Water?	Ship?	Cetac?
									Deg.	Min.	S						
1	53A	27	90	7/28/99	16:36	1	001	blue whale	31	44.12	N	116	54.46	W	N	N	N
2	53A	35	90	7/28/99	16:40	1	001	blue whale	31	44.39	N	116	51.35	W	N	N	N
3	53A	22	90	7/28/99	16:55	1	002	blue & bottlenose dolphin	31	44.11	N	116	51.08	W	Y	Y	Y
4	53A	32	90	7/29/99	10:24	1	008	blue whale	30	38.45	N	118	54.23	W	Y	Y	N
5	53A	29	90	7/29/99	10:27	1	008	blue whale	30	38.04	N	118	54.84	W	N	N	N
6	53A	15	90	7/29/99	12:07	1	009	blue whale	30	33.36	N	119	06.08	W	N	N	N
7	53A	37	90	7/29/99	12:15	1	019	blue whale	30	32.13	N	119	07.02	W	N	N	N
8	53A	22	90	7/29/99	12:35	142	010	blue whale	30	30.80	N	119	06.71	W	X	Y	Y
9	53A	34	90	7/29/99	12:53	2	010	blue whale	30	30.60	N	119	07.64	W	N	N	N
10	57	19	60	8/3/99	8:25	2	20	whitebelly spinner	15	44.78	N	122	5.39	W	Y	Y	Y
11	57	25	60	8/3/99	10:30	2	22	whitebelly spinner	15	28.35	N	122	4.26	W	Y	Y	Y
12	53	30	90	8/7/99	18:20	2	35	Bryde's	3	21.73	N	122	49.31	W	?	Y	N
13	53	34	90	8/7/99	18:41	2	35	Bryde's	3	22.67	N	122	48.83	W	?	Y	Y
14	57	25	60	8/8/99	18:30	3	37	pilot whale	5	34.3	N	123	1.52	W	Y	Y	N
15	57	19	60	8/8/99	19:22	3	38	flossas	5	3.52	N	124	8.25	W	Y	Y	N
16	53	34	90	8/9/99	11:06	3	39	Bryde's	6	35.3	N	125	1.73	W	Y	Y	N
17	53	30	90	8/9/99	11:13	4	39	Bryde's	6	3.91	N	125	1.70	W	Y	Y	N
18	57	25	60	8/9/99	16:20	4	41	pilot whale	6	34.73	N	125	31.9	W	Y	Y	N
19	57	19	60	8/10/99	9:51	4	43	pilot whale	8	14.68	N	126	40.76	W	Y	Y	N
20	57	18	60	8/10/99	11:37	4	47	pilot whale	6	4.20	N	127	04.55	W	Y	Y	N
21	63	24	90	8/13/99	9:08	4	52	Bryde's	5	23.42	N	134	24.56	W	N	R	R
22	63	30	90	8/13/99	9:09	4	52	Bryde's	5	23.42	N	134	24.56	W	N	R	R
23	57	25	60	8/18/99	15:39	4	69	pilot whale	7	10.52	N	145	10.89	W	Y	Y	Y
24	57	12	60	8/18/99	19:42	4	70	spinner	7	41.14	N	145	20.10	W	Y	Y	Y
25	57	25	60	8/20/99	17:42	445	85	spinner	10	09.65	N	148	30.58	W	Y	Y	Y

Here is the list which is published in the Navy sonobuoy manual with the asterisked channels prohibited as noted.

Sono- buoy # (53A, 57B)	Type	Chan#	Depth Setting	Date	Time	Tape#	Sight#	Species	Latitude		N Long	itude	E Water?	Ship?	Cetac?
									Deg.	Min. S Deg.					
26	57B	25	60	8/22/99	14:04	5	92	5*410	3	47.20	N	152.52	14.01	W	Y
27	57A	25	60	9/6/99	12:26	6	151	Oceanodroma	14	10.0	N	138.13	049.10	W	Y
28	57A	19	60	9/9/99	14:20	76	106	Ardouine gire	14	11.3	N	129.53	053.10	W	Y
29	57A	25	60	9/9/99	18:13	6	108	Slong whale	13	49.4	N	167.91	052.00	Y	Y
30	53A	30	400	9/13/99	16:35	-	63	B.edeni	02°	01.7	N	84°	50.0	W	Y
31	53A	34	400	9/13/99	16:37	6	103	B.edeni	02°	01.7	N	84°	50.0	W	Y
32	53A	40	90	9/23/99	17:44	-	84	B.edeni	01°	05.96	N	124.0	45.5	W	Y
33	53A	47	90	9/23/99	17:46	6/8	124	B.edeni	02°	05.96	N	124°	45.5	W	Y
34	57	12	90	9/17/99	11:47	7	133	Pseudorca	02°	18.2	S	115°	41.2	W	Y
35	53	34	90	9/17/99	15:43	7	134	B.edeni	02°	11.0	S	115.0	38.6	W	Y
36	53	34	90	9/17/99	15:56	-	187	B.edeni	03°	115.0	N	016.0	35.9	W	Y
37	53	40	90	9/24/99	16:51	7	137	B.edeni	03°	45.8	N	013.0	35.4	W	Y
38	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	53	58	400	10/4/99	18:16	8/9	-	107	09°	14.0	W	087°	06.8	W	Y
40	57A	19	60	10/10/99	09:30	10	273	Tuszipos	07°	29.5	N	089°	55.1	W	Y
41	57A	25	60	10/10/99	12:07	10	274	Globicephala	07°	23.82	N	89°	59.80	W	Y
42	57A	17	60	10/10/99	12:25	10	274	Globicephala	07°	23.04	N	89°	59.24	W	Y
43	57A	19	60	10/10/99	11:25	10	278	Orca	05°	16.7	W	91°	08.3	W	Y
44	53B	58	400	10/11/99	08:25	9	1782	B.musculus	07°	57.22	N	116.7	25.4	W	Y
45	53B	52	90	10/12/99	09:12	9/1	2022	B.musculus	07°	54.6	N	116.2	24.4	W	Y
46	53B	54	90	10/12/99	10:36	10	274	B.musculus	08°	69.4	N	117.3	24.4	W	Y
47	53B	01	90	10/12/99	11:23	11	2649	B.musculus	08°	49.0	N	117.0	24.4	W	Y
48	53B	01	90	10/12/99	11:23	11	2649	B.musculus	08°	49.0	N	117.0	24.4	W	Y
49	53B	19	90	10/12/99	11:49	11	2649	B.musculus	08°	49.0	N	117.0	24.4	W	Y
50	53B	47	90	10/12/99	12:31	10	274	B.musculus	07°	57.22	N	116.7	25.4	W	Y

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Sono- buoy #	Type (53A,57B)	Chan#	Depth Setting	Date	Time	Tape#	Sight#	Species	Latitude		Longitude		Min. W	E Water?	Ship?	Cetac?
									Deg.	Min.	S	Deg.	Min.	N		
51	53B	12	90'	10/13/03	0838	-	Test		03	48	92	22	W	Y	Y	Y
52	53B	58	90'	10/14/03	1621	1112	316	<i>B. edeni</i>	14	54.3	41	10.3	W	Y	Y	Y
53	53B	58	90'	10/14/03	1310	13	332	<i>A. macrourus</i>	9	55.4	20	96	W	Y	Y	Y
54	53B	58	90'	10/14/03	1310	13	332	<i>A. macrourus</i>	9	55.5	14	96	W	Y	Y	Y
55	53B	2	90'	10/16/03	1328	1814	322	<i>A. macrourus</i>	9	55.5	14	96	W	Y	Y	Y
56	53B	48	90'	10/16/03	1649	14516	333	<i>B. macrourus</i>	09	53.4	10	96	W	Y	Y	Y
57	57A	25	50'	10/16/03	1123	11	339/8	<i>G. hypostomus</i>	07	48.5	34	91	W	Y	Y	Y
58	53B	25	400'	10/16/03	0753	17	343	<i>B. edeni</i>	05	41.72	11	92	W	Y	Y	Y
59	53B	58	90'	10/18/03	0845	n/a	344	<i>G. hypostomus</i>	05	45.92	01	98	W	Y	Y	Y
60	57A	32	90'	10/18/03	0854	n/a	344	<i>B. edeni</i>	05	45.93	01	98	W	Y	Y	Y
61	57A	12	60'	10/19/03	0812	1718	349	<i>G. hypostomus</i>	08	23.85	11	98	W	Y	Y	Y
62	57A	19	102'	10/20/03	1143	16	367	<i>G. hypostomus</i>	16	02.77	10	98	W	Y	Y	Y
63	53B	54	90'	10/30/03	0926	19	408	<i>B. edeni</i>	08	07.75	11	103	W	Y	Y	Y
64	57A	19	102'	11/06/03	0751	19	432	<i>G. hypostomus</i>	08	23.89	11	115	W	Y	Y	Y
65	57A	17	60'	11/06/03	1412	20	475	<i>S. longirostris</i>	10	11.97	11	116	W	Y	Y	Y
66	57A	19	60'	11/06/03	1714	20	490	<i>S. longirostris</i>	10	11.97	11	116	W	Y	Y	Y
67	57A	12	60'	11/06/03	1214	20	493	<i>S. longirostris</i>	14	03.99	24	105	W	Y	Y	Y
68	53B	60	90'	11/21/03	(1432)	21	515	<i>G. maculatus</i>	18	36.95	11	104	W	Y	Y	Y
69	53B	63	90'	11/21/03	1244	21	530	<i>G. maculatus</i>	18	36.95	11	105	W	Y	Y	Y
70	53B	216	90'	11/21/03	1321	21	570	<i>G. maculatus</i>	16	03.95	11	106	W	Y	Y	Y
71	53B	63	90'	11/21/03	1634	22	523	<i>G. maculatus</i>	17	25.76	11	110	W	Y	Y	Y
72	57A	17	60'	11/22/03	0726	22	556	<i>G. maculatus</i>	17	36.70	11	111	W	Y	Y	Y
73	57A	17	60'	11/23/03	1447	22	567	<i>G. maculatus</i>	17	16.95	11	112	W	Y	Y	Y
74	53B	63	90'	11/24/03	1640	22	586	<i>G. maculatus</i>	20	54.26	11	113	W	Y	Y	Y

75

Sonobuoy Precruise

#1

I provided 100' of antenna cable (RG8/U) and a 14' antenna (2 m wavelength) to The ET on The Jordan (Mike Wallace). He said he would install it as high as possible.

The resonance frequency of this antenna should be 144-148 MHz.

High frequency sonobuoys

I'll be away until Aug 9. I will check my internet e-mail occasionally

pottwale@yahoo.com

6 chan 12^{*}
7 chan 19^{*}
10 chan 25^{*}

*protected frequencies.

1 chan 19 ready to go

07/28/99

(53)

16:36

deployed at 16:36 and
sunk.

Sonobuoy #1

- no sound was heard

- channel 27 (black ~~off~~, then ~~on~~)

- just heard static in ship or water noise

- on spectrogram there are dark bands at

63, 123, 181, 243, 304 Hz

- don't see bands at 7.5 or 15 kHz

7/28/99
16:40

53

Sonobuoy #2

- deployed @ 16:40 and sunk

- no ship or water noises were heard (red at first, then both black + red)

* same banding pattern on spectrogram as Sonobuoy #1

7/28/99

(53)

16:55

- we dismantled this sonobuoy Sonobuoy #3
(took off the metal casing - it had been left on for the previous 2 sonobuoys) ^{TRP&I}
- heard water noise + ship noise
- heard what sound to be dolphin whistles thru whole recording
- don't think dolphins have been sighted in the area

- @ 16:59 the whales passed abeam >0.25 mi from ship.

- 17:03 back to course and speed

- whenever they talk on the radio in in the ship, it
* interrupts the sonobuoy transmission -
- is this because of the channel I'm recording receiving on?

- 17:09 - still hearing dolphins

- but haven't seen any on the spectrogram

- 17:11 we are chasing a sighting now

- 17:13 - not hearing dolphs any more

- 17:15 - some dolphs, but mainly static now

- record level was set too high for most of this recording just turned it down to 8 (17:15) ⁽¹⁰⁾

7/28/99

10:24

(53)

S#8

- 17:18 - Paused recording (no whistles, lots of static)

- 17:19:22 - unpause - whistles again

- dolphins are all around us (17:21)

- S#002

- short-beaked common dolphs

- 17:22 - stopped recording

- back to course + speed

- the radios they talk on in the ship are @ ,
157.125 MHz +
164.075 MHz

- choose channels that are as far away from those
as possible (32-34, 29-31)

- 17:35 I'm still hearing water + whistles loud
and clear

- 17:41 - no more whistles, still hearing water

- 17:43 - I lied - I hear some faint whistles now

- 17:45 - mostly picking up other people talking + static now.
still hear water noise in between

- 17:51 - water noise fading (4 bars)

- 17:59 - mainly hearing static, v. little water noise

- 18:04 - stopped listening - just hearing static now

2 whales ~ 3mi apart

- 10:30 we are within 1 mile of one of the whales

Sonobouy #4

TAPE 1

- 10:33 switched left channel to channel 32
(because not hearing water or anything from
channel 29)

- 10:24 deployed SB #4 - chan 32

- 10:37 - we are right on top of one of the whales. we're getting
photographs + then we'll stop for 10 mins of recording.

- I don't think a new program # was assigned to this
recording.

- + started recording at 10:20

- 10:43 - stopped for 10 min of recording

- we're right on top of a whale now, but it's
moving away quickly away from us

- I'm getting a strong signal from both radios (all bars lit
up).

- 10:55 switched Black to chan 29 to double check

Son. #5.

- switched back to chan 32 after ~20 sec

- 10:59 - we are back underway.

- 11:01 - stopped recording

7/29/99

10:27

(53)

Sonobuoy #5

TAPE 1

-the whale we were closest to seemed smallish

11:20: Signal received is down to "4.5 bar" strength

11:52: water noise gone ~ 10 minutes ago.

-Deployed: 10:27 chan 29

-no water noise heard

-I think it sank

-42111 stopped record

-10:33 sonobuoy switched to chan 33 to listen to
sonobuoy #4

-no change, no received signal, so sonobuoy switch
deployed

-listened to this channel again at 10:55 - still
no change in the signal
(continued bonding pattern to CR #1+2)

7/29/99

12:07 (53)

Sonobuoy #6
TAPE 1

12:02 record on

12:07 deployed chan 15

12:09 accidentally stopped record + restarted.

we were ~~right on top of~~ within 0.25 mi
of the whale when we deployed

- no water or boat noise heard

12:11 stopped record

no change in vocal (sound) pattern like

seen at 12:07 after deployment

possibly w/ people talking but don't think
it's from the crew

7/29/99

(53)

12:15

Sonobuoy #7

Tape 1

12:13 record on

12:15 deployed (chan 37)

-we were right on top of the whale when I
deployed:

-not hearing any water noise - just static

12:19 - stopped recording

12:32

Same Circuit as SR #1.

7/29/99

12:35

53

Sonobuoy #8
TAPE 1/2

12:35 - record on

12:35:30 + sonobuoy was deployed
chan 22

- I think I hear water!! (+ the ship)

- I'm on a bad frequency though, I'm picking
up the radio

12:37 - tape ended

12:38 - started tape 2

12:39 - I'm not hearing water any more - just static
- stopped recording

Not keeping this recording

53

7/29/99
12:53

Sonobuoy #9

12:52 - record on

12:53 - sonobuoy in (chan 34)

- the boat is stationary

- 12:56 underway

- I'm only hearing static

- 12:57 - stopped recording

Not keeping this recording

8/3/99

57A

8:25

Sonobuoy #10
TAPE 2

8:24 - start record - New track # wasn't assigned on tape.
8:25 - drop sonobuoy chan 19

8:27 - stop + record for 10 min

- hearing boat + water noise!

- 8:27'36 - heard a couple of whistles, but not seeing them on GRAM

- Pure school of whitebelly spinners

- signal coming in loud + clear - all B bars are lit

- the dolphins were ~500 m away abeam of the ship when I dropped the SB

- 13:48 (A-time) - heard a whist.

- 15:17 - whist

- This Sonobuoy was deployed with the aluminum case on + the plastic lid on the aluminum case intact.

- I saw it float

- 8:37 - we're only ~ 500 m from the SB right now
we're going to go back to course + speed now

40

- 8:39 - stop record

8/3/99

(57A)

10:30

sonobuoy #11
THREE 2

8:52 - still lots of water noise, no boat noise,
- 10 dolphins
- all bars lit up on radio

9:29 - down to 3-4 bars

9:33 - hearing faint whistles

9:49 - more static now

- 3-4 bars on radio

10:00 - ↑ static

- 2-3 bars

10:14 - ↑ static

- stopped monitoring this channel because
we have another spinner sighting.

10:29 - record on

10:30:30 (?) - SB in chan 25

- going to steam for ~1mi + then stop for 10min
getting whistles!

Spinners (hybrid) (whitebelly)

- dolphins ~300 m off port side when dropped SB

10:35 - stopping for 10 min

10:35 - SB is cutting out periodically

- still hear water + whistles, but much fainter
- all bars lit on radio

10:34 - whist (A-time)

10:46 - back to course + speed

- paused inc.

10:50 - rec on - heard a couple of whistles

10:52:30 - rec off

SB isn't cutting out any more

11:26 ↑ static

- 4-5 bars

8/7/99
18:20
53

Sonobuoy #12
TAPE 2

11:32 - 3-4 bars

11:37 - 1 static

12:00 - all static

- 1-3 bars

Will tape over the last 9 mins of this recording

18:19 rec on chan 30 (no new track #)

18:20 SB in

18:36 pause

18:38 rec on

- 2 Bryde's whales

- very close when SB in

19:18 stop rec

20:00 down to 2 bars on radio

8/7/99

18:41

(53)

TAPE 2

Sonobuoy #B

18:38 rec on chan 34 - black (chan 30 red)

18:41 SB in

18:43 both chans to 34

18:45 red chan to 30

18:48 stop for 10 min

18:56 back to course + speed.

19:18 stop rec.

20:00 down to 2 bars on radio

Possible call @ 1:10:12 (A-time) on MAC2

6/8/99

18:20

57A

Sonobuoy #14

TAPE 3

Pilot whales!

18:19 rec on - tape 3 (prog) (paused for 20sec so onto prog 20)

18:20 SB in - chan 25

- animals 300 m off starboard bow
18:28 stop for 10 min

18:32 boat noise still loud - moving another mile away

18:42 pause - loud water noise

18:43 rec on - whales sound close (prog 3)

18:46 pause - back to course + speed

18:51 turning on more dolphins

18:52 pause (30 mins into tape)

- whists still coming in loud + clear

19:01 all bars lit on radio

20:18 - 5' bars

- lots of whistling!

* 20:30-21:45 - CTD +

net tows

21:02 - 6 bars

- many loud whale whistles + clicks

22:42 - faint whistles, 5-6 bars

23:03 - few whistles, a lot of water noise

23:03 - 4-5 bars

23:54 - 3-4 bars, faint whistles

00:19 - 2-3 bars, static, faint whistles

8/8/99

19:22

(57A)

Sonobuoy #15
TAPE 3

* we're only travelling @ 4.5⁵ kn tonight (to avoid hurricane)

00:30 lots of static + water, over faint whistles
- 2-3 bars
- stopped listening

1922 - rec on chan 19 (prog 5, tape 3)

1923 - SB in

1927 - pause - loud boat

1928 - rec - prog 6

1946 - pause - static

1946 - rec - prog 7

- whists

* = are we picking up the pilot whales
on this SB + were we picking up
Fraser's on SB #14?

1948 - stop rec

1949 - rec - prog 8

- both SBS

Chan 19 - red (right)

Chan 25 - black (left)

- sounds like we're picking up
pilot whales on both SBS

1953 - stop rec

The pilot whales were approx. 1.5 miles away
from the Fraser's

20:18 - 4 bars

- lots of whistling
- static

8/9/99

11:06

53

Sonobuoy #16
TWS 3

20:20 listening to both channels

- hearing vocs 1st on left channel & then on rt channel

- probably hearing both Fraser's & pilot whales

20:30 - Stop for CTD

21:02 - Many loud whistles + clicks

21:06 - CTD finished

- still hearing many whistles

21:45 - Manta finished

- still many whistles - a bit fainter now
- more water noise

22:03 - lots of clicks

22:18 - Bongo finished

22:41 - more static, ~~very~~ faint whistles, 4-5 bars

23:03 - few whistles, a lot of water noise

23:33 - 2-3 bars, lots of static

23:54 - 2 bars, ~~and~~ static static comes + goes

- still hear faint whistles

00:05 - 1-2 bars - all static

- stopped listening

Bryde's whale

11:04 rec on - chan. 34

prog 9

11:06 SB in

- no boat or water noise

11:11 pause

11:12 rec on prog 10

11:13 ~~rec~~ - rt chan. 34

- lt chan 30

11:17 stopped listening to chan 34

8/9/99

11:13

(53)

Sonobuoy #17
Tape 4

Brydes whale - a biopsy sample was taken

11:12 rec on prog 10

11:13 SB in

- rt channel 34

- lt channel 30

- - hearing boat and water noise
- all bars lit on radio

11:17 - both to channel 30

11:26 stopped 2 miles away

11:37 back to course + speed

11:40 tape ended

- start tape #4 → not keeping this recording!

11:46 pause

11:47 rec on prog 2

11:55 rt - 4-5 bars } static on both.

lt - 5-6 bars } still hearing water but
no whales

12:07 static buder. 3-5 bars 3-4 top radio

still hearing water 4-5 bottom radio

12:36 - just hearing static

2-3 bars (rt)

3-4 bars (lt)

- stopped listening

8/9/99
16:20
57A
Sonobuoy #18
TAPEx

Pilot whales.

16:20 rec on, SB in, all bars lit on both radios
chan 25

tape 4 prog 1

water, boat, whistles, clicks

16:32 pause - loud water noise, can hardly hear
whistles

Whales were ~0.25 mi away when SB dropped

16:34 Stopping for 10 min

16:36 rec on - heard some louder rcs. prog 2

16:37 pause - water too loud

16:40 back to course + speed

16:42 rec on - prog 3

- louder whistles

16:45 pause - loud water, few whistles

16:52 6 bars rt chan

7 bars lt chan

lots of water, no more whistles.

16:55 rec on prog 4

16:57 pause

17:03 hearing faint, intermittent whistles, lots of
water

17:06 rt chan - 4-5 bars, some static

lt chan - 5-6 bars, some static