

**Harbor Porpoise Aerial Survey (HPAS) AS data format,**  
**as recorded by program PHOCOENA.COM**

Last updated: 3/10/2020

**Sample DAS section (starts below column indicators)**

	0	1	2	3	4	5	6	7
	1234567890123456789012345678901234567890123456789012345678901234567							
T	71	10/	9/90	16:	9:31	N37:57.20	W122:47.49	700
V	72	10/	9/90	16:	9:31	N37:57.20	W122:47.49	700
P	73	10/	9/90	16:	9:31	N37:57.20	W122:47.49	700
A	74	10/	9/90	16:	9:31	N37:57.20	W122:47.49	700
W	75	10/	9/90	16:	9:31	N37:57.20	W122:47.49	700
*	76	10/	9/90	16:10:	1	N37:57.22	W122:48.49	700
W	77	10/	9/90	16:10:12		N37:57.25	W122:48.84	700
V	80	10/	9/90	16:10:33		N37:57.33	W122:49.55	700
E	81	10/	9/90	16:11:	1	N37:57.46	W122:50.43	700
C	82	10/	9/90	16:12:	1	N37:57.77	W122:52.35	700
R	83	10/	9/90	16:13:	1	N37:58.04	W122:54.33	700
S	84	10/	9/90	16:13:	1	N37:58.04	W122:54.33	700
S	85	10/	9/90	16:13:10		N37:58.08	W122:54.66	700
*	89	10/	9/90	16:17:	1	N37:58.97	W123:02.00	700
W	90	10/	9/90	16:17:14		N37:59.02	W123:02.40	700
S	91	10/	9/90	16:17:54		N37:59.19	W123:03.67	700
*	92	10/	9/90	16:18:	1	N37:59.22	W123:03.89	700
C	93	10/	9/90	16:18:26		N37:59.32	W123:04.67	700
*	94	10/	9/90	16:19:	1	N37:59.50	W123:05.74	700
S	95	10/	9/90	16:19:51		N37:59.75	W123:07.37	700
O	97	10/	9/90	16:20:42		N38:00.02	W123:08.97	700

Columns	Item	Format
1	Event Code	#
2	Blank	#
3-5	Line number	###
6-7	Blank	#
8-15	Date	MM/DD/YY
16	Blank	#
17-24	Time	HH:MM:SS
25	Blank	#
26-34	Latitude	NDD:MM.MM
35	Blank	#
36-45	Longitude	WDDD:MM.MM
46	Blank	#
47-50	Altitude	####
51-55	Data fields. Information is event-code specific, according to key below. All data except comments are RIGHT JUSTIFIED within the 5-character field.	
56-60		
61-65		
66-70		
71-75		

<b>Event code</b>	<b>Col&gt;50</b>	<b>Description/Key</b>
* = Auto-position	--	Automatically logged position (every minute)
C =Comment	51-132	Notes, corrections, etc
E = End effort	--	Temporary end effort to circle, go over land/clouds etc.
R = Resume effort (Cont'd)	--	Resume from temporary end effort

<b>Event code</b>	<b>Col &gt;50</b>	<b>Description/Key</b>
O= Transect End	--	Use to signal end of transect lines
T =Transect Start	52-55	Transect # (up to 4 numeric characters)
V =Viewing Condition		<i>E=excellent, G=Good, P=Poor, O=Off</i>
	51-55	Left inside (<35 degrees)
	56-60	Left outside (>35 degrees)
	61-65	Belly
	66-70	Right Inside (<35 degrees)
	71-75	Right Outside (>35 degrees)
P =Observer Codes		<i>2-character initials (unique)</i>
	51-55	Left Observer
	56-60	Belly Observer
	61-65	Right Observer
	66-70	Recorder
A = Altitude/Speed	51-55	Altitude in feet
	56-60	Speed in knots
W =Weather/Env.	51-55	<i>H=Haze/K=Kelp/N=None</i> (Priority when more than one present: K > H > N)
	56-60	% overcast BETWEEN SUN AND VIEWING AREA
	61-65	Beaufort sea state (0, 1, 2, 3, 4, 5)
	66-70	Horizontal sun ( <i>Clock system, 12 = ahead, 6=behind</i> )
	71-75	Vertical Sun ( <i>4=straight up, 1=high, 2=med, 3=low</i> )
S = Sighting (Mammal)	51-55	Sighting number (numeric, rarely with characters)
	56-60	Species code
	61-65	Number of animals (best estimate)
	66-70	Declination angle (LEFT = negative)
	71-75	Observer code (numeric; later initials/characters)

## **SPECIES CODES:**

### ***Recorded using 'Sighting' key (F2)***

#### ***Large whales***

PM Sperm whale  
MN Humpback whale  
BM Blue whale  
BP Fin whale  
ER Gray whale  
EG Right whale  
BB Sei whale  
BE Bryde's whale  
UB Unid. baleen whale  
LW Unid. large whale

#### ***Medium-sized whales***

BD *Berardius bairdii*  
ZI *Ziphius cavirostris*  
UM *Mesoplodon* sp.  
MC *Mesoplodon carlhubbsi*  
UK *Kogia* sp.  
BA Minke whale  
SW Unid. small whale

#### ***Dolphins/Porpoises***

PP Harbor porpoise  
PD Dall's porpoise  
DD *Delphinus* (unspecified)  
DS *Delphinus* (short-beaked)  
DL *Delphinus* (long-beaked)  
LB *Lissodelphis*  
LO 'Lags' / Pacific white-sided  
GG Grampus / Risso's  
GM Pilot whale  
OO Killer whale  
UD Unid. dolphin/porpoise

#### ***Pinnipeds/Fissiped***

PV Harbor seal  
MA Elephant seal

EJ Steller sea lion  
CU Northern fur seal  
EL Sea otter  
PU Unid. pinniped  
US Unid. Seal  
[ZC CA sea lion - Not recorded]

#### ***Other***

M1 Small *Mola mola* (<2ft)  
M2 Medium *Mola mola* (2-4ft)  
M3 Large *Mola mola* (>4ft)

### ***Recorded using 'Turtle Sighting' (shift-F4)***

#### ***Turtles***

DC Leatherback  
CC Loggerhead  
CM Green Turtle  
UH Unid. hardshell

#### ***Miscellaneous (Recorded in comments)***

ALBF Black-footed albatross  
FB#x Fish Ball (e.g. fb1m, fb10s)  
Sharks – comment  
JFx### - JF species & % composition  
(x = C for Chrysaora, M for moon jelly, E for egg-yolk jelly, and O for other)  
(e.g. JFC080 JFM020 for 80% chrysaora, 20% moon jelly; record whenever species composition changes.)