Appendix II Flight Heights

Bird flight altitude was estimated from the digital still images. It was determined using bespoke APEM software that applies a set of rules developed in-house and trigonometry to provide an estimate of flight height. The accuracy of the application of the trigonometric rules varies depending on the size and position of the bird. From the basic premise that the higher the bird is flying the greater the proportion of its reference length will be in the image; its flight height can be calculated. Flight height estimates are less reliable for birds that are diving or turning sharply (this affects the measurement of body length and wingspan from the image), such birds are removed from the sample used to calculate flight heights.

Table 1 Flight height summary table

Species	Number of individuals	Range		Median flight height[1,2]	95% Confidence Limit
		Minimum	Maximum		
Atlantic Puffin	1	28	28	28	68
Black-legged Kittiwake	23	11	149	51	45
Bonaparte's Gull	14	4	75	28	37
Commic/Forster's Tern	2	43	79	61	45
Common Tern	3	3	49	20	44
Cory's Shearwater	11	12	82	40	44
Forster's Tern	1	18	18	18	35
Great Black-backed Gull	23	3	149	34	43
Great Shearwater	5	5	53	16	33
Herring Gull	23	1	158	59	64
Lesser Black-backed Gull	1	68	68	68	37
Long-tailed Duck	3	8	34	16	56
Murre/Razorbill	2	15	41	28	41
Northern Fulmar	48	2	209	27	36
Northern Gannet	35	1	137	27	36
Parasitic Jaeger	1	20	20	20	109
Razorbill	1	25	25	25	63
Roseate Tern	1	60	60	60	26
Sooty Shearwater	5	2	69	12	38
Storm-Petrel species	3	4	59	27	45
White-winged Scoter	6	10	55	31	37
Wilson's Storm-Petrel	1	14	14	14	32

[1] Flight heights could not be calculated for all individuals; therefore, only individuals for which a height could be calculated are included here.

[2] Where only one flight height could be calculated for a species the median value is the calculated flight height.