Checks performed by the function airdas_check from package swfscAirDAS:

- Event codes are one of the following: #, *, 1, A, C, E, O, P, R, s, S, t, T, V, W
- The effort dot matches effort determined using T, R, O, and E events
- There is an O event between each T event, and vice versa, i.e. the data does not start a new transect while still on a transect and does not end a transect when already not on a transect
- A T or R event does not occur while already on effort
- An E event does not occur while already off effort
- When the file ends, the data must be off effort and not still on a transect (i.e. an O event must occurred more recently than a T event)
- All Data# columns for non-C events are right-justified
- NAs are allowed for all data values when off effort except: altitude, speed, species, and group size
- The following events have NA (blank) Data# columns: *, R, E, O
- For PHOCOENA data, all non-C events have NA (blank) Data6 and Data7 columns

In addition, event/column pairs must meet the following requirements:

Item	Event code	Requirement
Viewing conditions	V	Must be one of: e, g, p, o, or NA (blank). Not case sensitive
Altitude	A	Can be converted to a numeric value, and is not NA
Speed	A	Can be converted to a numeric value, and is not NA
HKR	W	Characters must consist of: n, h, k, r, or NA (blank). Not case sensitive; y is also accepted for PHOCOENA data
Percent overcast	W	Must be a whole number between 0 and 100 (leading zeros are ok)
Beaufort	W	Must be a whole number between 0 and 9
Jellyfish	W	Must be one of 0, 1, 2, or 3
Horizontal sun	W	Must be one of 0:12 (leading zeros are ok)
Vertical sun	W	Must be one of 0:4 (leading zeros are ok)
Observers	P	Each entry must be two characters, and no observer code can be used twice in the same P event
Sighting (mammal)	S	Angle must be a whole number between -90 and 90 (leading zeros are ok)
Sighting (mammal)	S	Group size must be a whole number between 1 and 5000 (leading zeros are ok)
Sighting (mammal)	S	Species codes must be specified in sp.codes, and the first must not be NA
Sighting (mammal)	S	Observer code must be exactly two characters, and one of the current observers as specified by the most recent P event
Sighting (mammal)	S	Angle must be negative if sighting made by left observer, and positive if made by right observer
Sighting info	1	Species percentages can be converted to numeric values, and sum to 100

Sighting info	1	Unused columns (DateTime, Lat, Lon, and Data1-4) of a '1' event must be NA (blank)
Sighting info	1	Every S code with multiple species has a 1 code immediately after it
Sighting info	1	For every 1 code with *n* non-NA sighting percentages, the event before is an S event with *n* non-NA species codes
Resight	s	Angle can be converted to a numeric value (leading zeros are ok)
Resight	s	Unused resight columns (Data3-7) must be NA (blank)
Turtle sighting	t	Angle must be a whole number between -90 and 90 (leading zeros are ok)
Turtle sighting	t	Group size must be a whole number between 1 and 10 (only included in CARETTA data; leading zeros are ok))
Turtle sighting	t	Species code must be not NA and specified in sp.codes
Turtle sighting	t	Observer code must be exactly two characters
Turtle sighting	t	Turtle size must be a whole number between 1 and 9 (leading zeros are ok); one of s, m, l is also accepted for CARETTA data
Turtle sighting	t	Travel direction must be a whole number between 0 and 360 (only included in TURTLE data; leading zeros are ok))
Turtle sighting	t	Tail visible must be one of y, n, u, or NA (blank). Case sensitive
Turtle sighting	t	In TURTLE data, the Data7 column must be NA (blank)