All event records, except events "1"-"8" and "?", begin with these six data fields:

Sequence (columns 1-3) Event (columns 4-4) On Effort (columns 5-5) Time (columns 6-11) Date (columns 13-18) Position (columns 20-39),

followed by up to eight more data fields (depending on the Event code in column 4) with the following locations in the record:

Field 1 (columns 41-44) Field 2 (columns 46-49) Field 3 (columns 51-54) Field 4 (columns 56-59) Field 5 (columns 61-64) Field 6 (columns 66-69) Field 7 (columns 71-74) Field 8 (columns 76-79) Field 9 (columns 81-84)

#### **Event "B"** Begin effort for the day.

Field 1: Cruise Number, the unique number assigned to the cruise.

Field 2: **Mode**, passing or closing on sightings. C=closing, P=passing.

Field 3: **Dev from GMT**, the difference in hours between local time and GMT.

Field 4: **Echo Sounder**, monitors use of EQ50 or similar echo sounding gear.

Y = in use, N = not in use.

#### **Event "R"** Resume effort. in the study area.

Field 1: **Effort Type**: S = Standard, N = Non-standard, F = Fine scale.

\*\*\* Note that some cruise files contain a lower-case "r." event to denote non-standard survey effort. This lower-case "r" event has never been a function option within Wincruz and represents a manual-edit performed by cruise leaders for certain datasets. The need for lower-case "r" was obviated when implementation of Effort Type was included within Wincruz, such as "S", "N" and "F" for standard, non-standard, and fine-scale effort types, respectively. Lower-case "r" events are equivalent to uppercase "R" events with an effort type = "N".

**Event "E"** End on-effort searching mode. (No other data fields accompany this event.) Field 1: **Reason for Ending** 

#### Event "P" Observer Positions.

- Field 1: **Left Bino**, identity of the observer on the port binoculars.
- Field 2: **Rec**, identity of the observer acting as data recorder.
- Field 3: **Right Bino**, identity of the observer on the starboard binoculars.
- Field 4: **Ind Obs**, identity of the observer acting as independent observer.

## Event "V" Sea state viewing conditions.

- Field 1: **Beaufort**, beaufort sea state.
- Field 2: **Swell Ht**, height of predominant swell in feet.
- Field 3: **Swell Dir**, compass direction of predominant swell.
- Field 4: **SSurf Temp**, sea surface temperature, normally left blank.
- Field 5: **Wind Speed**, true wind speed in knots.
- Field 6: **Observation Index**, subjective value between 1 and 5, decimal values ok

# **Event "N"** Navigation information.

- Field 1: Course, direction the ship is moving, course made true.
- Field 2: **Speed**, ship's speed over ground.
- Field 2: Water Color, Forel Scale.

## Event "W" Weather information.

- Field 1: **Fog or Rain**, indication of the presence of rain, fog, or haze. 1 = no fog/rain, 2 = fog, 3 = rain, 4 = rain and fog, 5 = haze.
- Field 2: **Horiz Sun**, horizontal sun angle, corresponding to a clock face: 12 = on the bow, 3 = starboard beam, 6 = astern, 9 = port beam, etc.
- Field 3: **Vert Sun**, vertical sun angle: 12 (overhead), 1, 2 or 3 (at the horizon).
- Field 4: Wind Dir, wind direction in degrees, relative to true North.
- Field 5: **Visibility**, distance in nautical miles at which a dolphin could be seen surfacing with the water (not sky) as background.

# **Events "S" or "K", "M"** Marine mammal sighting. (S = standard sighting, K = tracker sighting, and M = matched sighting)

- Field 1: **Sight**, the unique sighting number.
- Field 2: **Detec By**, identity of the observer who first detected the cue leading to the sighting.
- Field 3: **Sighting Cue**, type of cue that led to the sighting. 1 =birds, 2 =splashes, 3 =mammals, 4 =ships, 5 =other/unknown, 6 =whale blow.
- Field 4: **Sighting Method**, the method by which the school was detected. 1 = naked eye, 2 = 7x or 10x handheld binos, 4 = 25x mounted binos, 5 = unknown but not 25x, 6 = other/unknown, 7 = helicopter.
- Field 5: **Bearing**, the horizontal angle between the track line and sighting in degrees.
- Field 6: **Reticle**, the number of eyepiece reticle marks between the horizon and sighting in the binocular field of view.
- Field 7: **Distance**, the radial distance to the sighting in nautical miles.
- Field 8: **MM Heading**, the course the school is moving relative to the vessel's track line.

#### Field 9: **MM Speed**, estimated speed of the school in knots.

#### **Event "A"** Auxiliary sighting information.

- Field 1: **Sight**, the unique sighting number (same as in Event S).
- Field 2: (This field not used.)
- Field 3: **Photos**, indication of whether photographs were taken of the school. Y = yes, N = no.
- Field 4: **Birds**, indication of whether birds were present with the school. Y = yes, N = no.
- Field 5: **Sp1 Code**, the first of up to four species/stock components of the school.
- Field 6: **Sp2 Code**, the second of up to four species/stock components of the school.
- Field 7: **Sp3 Code**, the third of up to four species/stock components of the school.
- Field 8: **Sp4 Code**, the fourth of four species/stock components of the school.

## Events "s" or "k" Resighting information.

- Field 1: **Sight**, the sighting number assigned to the original sighting.
- Field 2: **Bearing**, the bearing to the sighting in degrees.
- Field 3: **Reticle**, the number of eyepiece reticle marks between the horizon and sighting in the binocular field of view.
- Field 4: **Distance**, the radial distance to the sighting in nautical miles.
- Field 5: **Course**, the course the school is moving relative to the vessel's track line.

# Event "t" Turtle sighting.

- Field 1: **TDetec By**, the identity of the observer that made the sighting.
- Field 2: **Sp Code**, the turtle species.
- Field 3: **TBearing**, the bearing in degrees to the turtle.
- Field 4: **TDistance**, the distance in nautical miles to the turtle.
- Field 5: **Num Turtles**, the number of individual turtles.
- Field 6: **Assoc JFR**, presence of associated jellyfish, floating debris, or red tide.
- Field 7: **TReticle**, the number of eyepiece reticle marks between the horizon and sighting in the binocular field of view.
- Field 8: **Maturity**, observer estimate of whether the turtle is an adult or juvenile.
- Field 9: Captured, whether the turtle was captured.

# **Event "F"** Fishing vessel or fishing gear or buoy sighting.

- Field 1: **Boat Detec By**, the observer who made the sighting.
- Field 2: **BBearing**, the bearing to fishing vessel/gear.
- Field 3: **Distance**, the distance in nautical miles to the vessel/gear.
- Field 4: **Reticle**, the number of eyepiece reticle marks between the horizon and sighting in the binocular field of view.
- Field 5: **Boat Type**, the type of boat or gear sighted.
- Field 6: **Number of Boats**, the number of individual boats, buoys or gear arrays.

#### **Event "C"** Comment. (Comments are not confined to discrete data fields.)

- **Event "Q"** Tracking team positions (used during special projects).
  - Field 1: **Obs A**, the identity of tracker team member number 1.
  - Field 2: **Obs B**, the identity of tracker team member number 2.
  - Field 3: **Obs C**, the identity of tracker team member number 3.
  - Field 4: **Obs D**, the identity of tracker team member number 4.

**Event "\*"** Automatic position recorded every 10 minutes if no intervening event is entered. (No other data fields accompany this event.)

**Event "#"** Deleted event. Event was deleted from the event buffer. (No other data fields accompany this event.)

- **Event "?"** Probable species/stock identity (used in conjunction with "A" events.)
  - Field 1: **Sight**, the unique sighting number (same as in Event S).
  - Field 2: (This field not used.)
  - Field 3: (This field not used.)
  - Field 4: (This field not used.)
  - Field 5: **Sp1 Code**, the first of four probable species/stock components of the school.
  - Field 6: **Sp2 Code**, the second of four probable species/stock components of the school.
  - Field 7: **Sp3 Code**, the third of four probable species/stock components of the school
  - Field 8: **Sp4 Code**, the fourth probable species/stock components of the school.
- Events "1"-"8" Observer estimates of school size and species/stock composition.
  - Field 1: **Obs Code**, identity of the observer providing estimates.
  - Field 2: **Bst Est Schl**, observer's best estimate of school size.
  - Field 3: **Hi Est Schl**, observer's highest estimate of school size.
  - Field 4: Lo Est Schl, observer's lowest estimate of school size.
  - Field 5: **Sp1 Percent**, observer's estimate of the percentage of the school represented by the first species/stock component.
  - Field 6: **Sp2 Percent**, observer's estimate of the percentage of the school represented by the second species/stock component.
  - Field 7: **Sp3 Percent**, observer's estimate of the percentage of the school represented by the third species/stock component.
  - Field 8: **Sp4 Percent**, observer's estimate of the percentage of the school represented by the fourth species/stock component.