Sierra Nevada Corporation

Interface Control Document

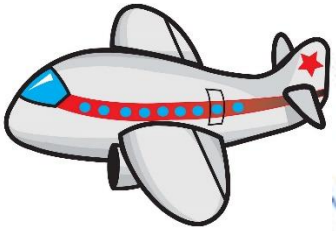
For the JOURNEY (.JNY) file format

Version 1.0
January 13, 2015

Contents

1 Introduction

The JOURNEY file format contains information about a vehicle and a journey that vehicle made. It is made up for the purposes of this assessment. Here is some clip art. Enjoy!



2 Generic Definition

A .JNY file shall contain ASCII text that is comma delimited. It shall contain multiple lines. The first line is the vehicle line, and the remaining lines are the waypoint lines.

2.1 Vehicle Line

The vehicle line is the first line in the .JNY file. It shall define the vehicle and its properties. See below for an example of this line.

```
PLANE,747,735000,195.66,63.413,231.82[,…,…]
```

2.1.1 Identifier Field

The identifier field is the first field of the vehicle line. It is free ASCII text that will uniquely identify the type of vehicle.

2.1.2 Descriptor Field

The descriptor field is the second field of the vehicle line. It is free ASCII text that gives a human-readable description of the vehicle.

2.1.3 Weight Field

The weight field is the third field of the vehicle line. It shall contain a floating point value that will express the weight of the vehicle in pounds.

2.1.4 Width Field

The width field is the fourth field of the vehicle line. It shall contain a floating point value that will express the width of the vehicle in feet.

2.1.5 Height Field

The height field is the fifth field of the vehicle line. It shall contain a floating point value that will express the height of the vehicle in feet.

2.1.6 Length Field

The length field is the sixth field of the vehicle line. It shall contain a floating point value that will express the length of the vehicle in feet.

2.1.7 Vehicle-Specific Fields

Specific vehicle types may optionally include additional fields. These are indicated above by the bracketed empty values. The identifier field shall be used to determine how to parse these additional fields.

2.2 Waypoint Lines

The waypoint lines are the remaining lines in the .JNY file. They shall define the places the vehicle visited on its journey. See below for an example of these lines.

```
39.488928,-105.015813,0
39.520592,-105.085924,1.22
39.400090,-105.089864,2.44
39.511024,-105.198970,3.66
39.552997,-105.055011,4.88
39.434900,-104.984686,6.10
39.420384,-104.955151,7.32
39.323475,-105.034129,8.54
39.390487,-105.037238,9.76
39.388776,-104.970613,10.88
```

2.2.1 Latitude Field

The latitude field is the first field of the waypoint line. It shall contain a floating point value that will express the latitude of this waypoint in decimal degrees.

2.2.2 Longitude Field

The longitude field is the second field of the waypoint line. It shall contain a floating point value that will express the longitude of this waypoint in decimal degrees.

2.2.3 Delta Time Field

The delta time field is the third field of the waypoint line. It shall contain a floating point value that will express the change in time in number of seconds elapsed since the last waypoint.

3 Vehicular Definitions

3.1 Car

A car is a type of vehicle that defines additional fields in the Vehicle line only. It will have the identifier field value of “CAR”, case-insensitive and quotes excluded.

3.1.1 Vehicle Line Additional Fields

Cars define 6 additional fields in the Vehicle line. See below for an example of this.

```
CAR,Leaf,3243,5.81,5.08,14.58,Nissan,2014,COMPACT,ELECTRIC
```

3.1.1.1 Manufacturer Field

The manufacturer field is the first additional field cars add to the vehicle line. It is free ASCII text that gives a human-readable name of the manufacturer of the car.

3.1.1.2 Model Year Field

The model year field is the second additional field cars add to the vehicle line. It is an unsigned integer value representing the model year of the vehicle.

3.1.1.3 Body Style Field

The body style field is the third additional field cars add to the vehicle line. It is ASCII text that will be one of “COMPACT”, “COUPE”, “SEDAN”, “SPORTS”, “CROSSOVER”, “SUV”, “MINIVAN”, “VAN”, “TRUCK”, “BUS”, or “SEMI”, case-insensitive and quotes excluded.

3.1.1.4 Fuel Field

The fuel field is the fourth additional field cars add to the vehicle line. It is ASCII text that will be one of “REGULAR”, “DIESEL”, “HYBRID”, or “ELECTRIC”, case-insensitive and quotes excluded.

3.2 Boat

A boat is a type of vehicle that defines additional fields in the Vehicle line only. It will have the identifier field value of “BOAT”, case-insensitive and quotes excluded.

3.2.1 Vehicle Line Additional Fields

Boats define 3 additional fields in the Vehicle line. See below for an example of this.

```
BOAT,Oceanis 60,48600,16.75,120.5,59.83,SAIL,8.2,Beneteau
```

3.2.1.1 Power Field

The power field is the first additional field boats add to the vehicle line. It is ASCII text that will be one of “UNPOWERED”, “SAIL”, or “MOTOR”, case-insensitive and quotes excluded.

3.2.1.2 Draft Field

The draft field is the second additional field boats add to the vehicle line. It shall contain a floating point value that will express the draft of the boat in feet. Draft is the vertical distance between the waterline and the bottom of the boat.

3.2.1.3 Manufacturer Field

The manufacturer field is the third additional field boats add to the vehicle line. It is free ASCII text that gives a human-readable name of the manufacturer of the boat.