

## Available Aircraft Types and Their Respective Speeds

**A320:** 520 kts

**B738:** 530 kts

**B734:** 465 kts

**B744:** 490 kts

**B737:** 520 kts

**A388:** 530 kts

**A333:** 460 kts

## Coordinates of Air Route Waypoints in Degrees

Coordinates of ATPOM are Latitude 0.406944444° and Longitude 105.3538889°.

Coordinates of BOBOB are Latitude 2.368333333° and Longitude 107.0994444°.

Coordinates of DAMOG are Latitude 4.206944444° and Longitude 105.0038889°.

Coordinates of DOLOX are Latitude 4.811388889° and Longitude 105.3797222°.

Coordinates of DOVOL are Latitude 3.513055556° and Longitude 103.8230556°.

Coordinates of DUBSA are Latitude 3.816944444° and Longitude 104.7611111°.

Coordinates of DUDIS are Latitude 7.0° and Longitude 106.8094444°.

Coordinates of ELGOR are Latitude 3.503888889° and Longitude 105.805°.

Coordinates of ESPIT are Latitude 2.003055556° and Longitude 107.44°.

Coordinates of HOSBA are Latitude 1.33° and Longitude 104.405°.

Coordinates of IDSEL are Latitude 3.408888889° and Longitude 103.9288889°.

Coordinates of KAMIN are Latitude 2.578888889° and Longitude 108.9269444°.

Coordinates of KETOD are Latitude 3.178888889° and Longitude 104.1619444°.

Coordinates of KILOT are Latitude 3.038055556° and Longitude 104.6730556°.

Coordinates of LIPRO are Latitude 2.895° and Longitude 105.1911111°.

Coordinates of LUSMO are Latitude 3.561388889° and Longitude 106.9261111°.

Coordinates of MABAL are Latitude 3.473888889° and Longitude 105.21°.

Coordinates of MABLI are Latitude 4.288055556° and Longitude 106.2130556°.

Coordinates of MASBO are Latitude 2.046666667° and Longitude 102.8808333°.

Coordinates of MELAS are Latitude 7.088888889° and Longitude 108.1530556°.

Coordinates of OBLOT are Latitude 1.715555556° and Longitude 106.6963889°.

Coordinates of OLKIT are Latitude 4.836111111° and Longitude 111.855°.

Coordinates of OMBAP are Latitude 2.521111111° and Longitude 106.545°.

Coordinates of OPULA are Latitude 3.531944444° and Longitude 106.355°.

Coordinates of OTLON are Latitude 3.131111111° and Longitude 104.335°.

Coordinates of PADLI are Latitude 3.155° and Longitude 103.5258333°.

Coordinates of RAXIM are Latitude 3.055° and Longitude 104.2869444°.

Coordinates of SABIP are Latitude 2.161111111° and Longitude 107.8455556°.

Coordinates of SURGA are Latitude -0.615833333° and Longitude 106.5219444°.

Coordinates of SUSAR are Latitude 3.98° and Longitude 105.2630556°.

Coordinates of TERIX are Latitude 4.255833333° and Longitude 109.5822222°.

Coordinates of TOMAN are Latitude 1.363055556° and Longitude 105.7880556°.

Coordinates of UGPEK are Latitude 3.613055556° and Longitude 104.1311111°.

Coordinates of URIGO are Latitude 3.418055556° and Longitude 104.1130556°.

Coordinates of VISAT are Latitude 3.438888889° and Longitude 104.5261111°.

Coordinates of VMR are Latitude 2.388333333° and Longitude 103.8716667°.

Coordinates of VPK are Latitude 3.383055556° and Longitude 103.4233333°.

Coordinates of SABKA are Latitude 1.8475° and Longitude 103.2869444°.

Coordinates of KK are Latitude 1.521666667° and Longitude 103.99°.

Coordinates of SJ are Latitude 1.2225° and Longitude 103.8541667°.

Coordinates of VJB are Latitude 1.664° and Longitude 103.6608889°.

Coordinates of SAROX are Latitude 2.800555556° and Longitude 102.6719444°.

Coordinates of TPG are Latitude 0.903611111 and Longitude 104.5144444°.

## Common Flight Paths in Sector 6

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "A320",  
  "departure": {  
    "af": "WMKK"  
  },  
  "initial_position": {  
    "latitude": "032505.00N",  
    "longitude": "1040647.00E",  
    "altitude": "FL370",  
    "heading": "87.11436821923061"  
  },  
  "air_route": ["IDSEL", "URIGO", "VISAT", "MABAL", "ELGOR", "OPULA", "LUSMO",  
    "TERIX", "OLKIT"],  
  "destination": {  
    "af": "WBKK"  
  }  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "B738",  
  "departure": {  
    "af": "WBGG"  
  },  
  "initial_position": {  
    "latitude": "022206.00N",  
    "longitude": "1070558.00E",  
    "altitude": "FL380",
```

"heading": "285.33249995492605"

},

"air\_route": ["BOBOB", "OMBAP", "LIPRO", "KILOT", "OTLON", "KETOD", "VPK"],

"destination": {

"af": "WMKP"

}

}

{

"time": <Initialization time of aircraft after simulation start in seconds>,

"type": "B734",

"departure": {

"af": "WSSS"

},

"initial\_position": {

"latitude": "023106.70N",

"longitude": "1035709.81E",

"altitude": "FL160",

"heading": "32.053335700277444"

},

"air\_route": ["RAXIM", "OTLON", "VISAT", "DUBSA", "DAMOG", "DOLOX",

"DUDIS"],

"destination": {

"af": "ZSFZ"

}

}

{

"time": <Initialization time of aircraft after simulation start in seconds>,

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"type": "B744",
"departure": {
  "af": "WMKK"
}, "initial_position": {
  "latitude": "032505.00N",
  "longitude": "1040647.00E",
  "altitude": "FL330",
  "heading": "87.11436821923061"
},
"air_route": ["IDSEL", "URIGO", "VISAT", "MABAL", "ELGOR", "OPULA", "LUSMO",
"TERIX", "OLKIT"],
"destination": {
  "af": "WBKK"
}
}
```

```
{
  "time": <Initialization time of aircraft after simulation start in seconds>,
  "type": "A388",
  "departure": {
    "af": "WBSB"
  },
  "initial_position": {
    "latitude": "034317.75N",
    "longitude": "1073208.46E",
    "altitude": "FL380",
    "heading": "255.502032736874"
  },
  "air_route": ["LUSMO", "OPULA", "ELGOR", "MABAL", "VISAT", "URIGO", "IDSEL",
"PADLI", "SAROX"],
```

```
"destination": {  
  "af": "WMKK"  
}  
  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "A333",  
  "departure": {  
    "af": "WMSA"  
  },  
  "initial_position": {  
    "latitude": "032048.47N",  
    "longitude": "1033316.81E",  
    "altitude": "FL160",  
    "heading": "105.35629179270975"  
  },  
  "air_route": ["KETOD", "OTLON", "KILOT", "LIPRO", "OMBAP", "BOBOB", "SABIP",  
    "AGOB"],  
  "destination": {  
    "af": "WBKL"  
  }  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "A320",  
  "departure": {  
    "af": "WSSS"
```

```
},
"initial_position": {
"latitude": "023106.70N",
"longitude": "1035709.81E",
"altitude": "FL160",
"heading": "32.053335700277444"
},
"air_route": ["RAXIM", "OTLON", "VISAT", "DUBSA", "DAMOG", "DOLOX", "DUDIS"],
"destination": {
"af": "VHHH"
}
}
```

```
{
"time": <Initialization time of aircraft after simulation start in seconds>,
"type": "B738",
"departure": {
"af": "WSSS"
},
"initial_position": {
"latitude": "023106.70N",
"longitude": "1035709.81E",
"altitude": "FL160",
"heading": "32.053335700277444"
},
"air_route": ["RAXIM", "OTLON", "VISAT", "DUBSA", "DAMOG", "DOLOX",
"DUDIS"],
"destination": {
"af": "ZSPD"
}
}
```

```
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "B738",  
  "departure": {  
    "af": "RCTP"  
  },  
  "initial_position": {  
    "latitude": "093147.00N",  
    "longitude": "1095009.00E",  
    "altitude": "FL400",  
    "heading": "214.60259773832308"  
  },  
  "air_route": ["MELAS", "MABLI", "SUSAR", "DUBSA", "UGPEK", "DOVOL", "PADLI",  
    "SAROX"],  
  "destination": {  
    "af": "WMKK"  
  }  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "B734",  
  "departure": {  
    "af": "WARR"  
  },  
  "initial_position": {  
    "latitude": "061454.00N",  
    "longitude": "1132122.00E",
```



```
"altitude": "FL360",  
"heading": "232.6982289415827"  
},  
"air_route": ["SUMDI", "SURGA", "ATPOM", "TPG", "SJ", "VJB", "SABKA",  
"MASBO"],  
"destination": {  
  "af": "WMKK"  
}  
  
  }  
  
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "B744",  
  "departure": {  
    "af": "WBSB"  
  },  
  "initial_position": {  
    "latitude": "045010.00N",  
    "longitude": "1115118.00E",  
    "altitude": "FL340",  
    "heading": "255.81768675597408"  
  },  
  "air_route": ["TERIX", "LUSMO", "OPULA", "ELGOR", "MABAL", "VISAT", "URIGO",  
"IDSEL", "PADLI"],  
  "destination": {  
    "af": "WMKK"  
  }  
  }  
  
{
```

```
"time": <Initialization time of aircraft after simulation start in seconds>,  
"type": "A388",  
"departure": {  
  "af": "WBKK"  
},  
"initial_position": {  
  "latitude": "045010.00N",  
  "longitude": "1115118.00E",  
  "altitude": "FL380",  
  "heading": "255.81768675597408"  
},  
"air_route": ["TERIX", "LUSMO", "OPULA", "ELGOR", "MABAL", "VISAT", "URIGO",  
  "IDSEL", "PADLI", "SAROX"],  
"destination": {  
  "af": "WMKK"  
}  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "A333",  
  "departure": {  
    "af": "WBGG"  
  },  
  "initial_position": {  
    "latitude": "015840.00N",  
    "longitude": "1083000.00E",  
    "altitude": "FL360",  
    "heading": "285.57121908634656"  
  },  
}
```

```
"air_route": ["SABIP", "BOBOB", "OMBAP", "LIPRO", "KILOT", "OTLON", "KETOD",  
"PADLI", "SAROX"],  
"destination": {  
  "af": "WMKK"  
}  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "A320",  
  "departure": {  
    "af": "WMKJ"  
  },  
  "initial_position": {  
    "latitude": "013950.40N", "longitude": "1033939.20E",  
    "altitude": "FL320",  
    "heading": "113.25103493940942"  
  },  
  "air_route": ["KK", "HOSBA", "TOMAN", "OBLOT", "ESPIT", "SABIP", "KAMIN"],  
  "destination": {  
    "af": "WBKK"  
  }  
}
```

```
{  
  "time": <Initialization time of aircraft after simulation start in seconds>,  
  "type": "B737",  
  "departure": {  
    "af": "WSSS"  
  },  
}
```

```
"initial_position": {  
  "latitude": "014522.00N",  
  "longitude": "1035443.00E",  
  "altitude": "FL320",  
  "heading": "356.3333539334049"  
},  
"air_route": ["VMR", "RAXIM", "OTLON", "VISAT", "DUBSA", "DAMOG", "DOLOX", "DUDIS"],  
"destination": {  
  "af": "ZBAA"  
}  
}
```