ATC Script Cheeker App

First get the info from the flight plan on the radar client. Here is what it would look like.

A screen shot of a computer

AI-generated content may be incorrect.Then enter It into the program. And press update flight plan.

A screenshot of a computer

AI-generated content may be incorrect.

**ATC\_Script\_Checker** does most of the calculations I need, but I need to update it to use the new GUI found in the "in\_progress" folder.

**Inputs**

* **Frequency** – Only for the output text.
* **Call sign** – Searches the airlines.csv for a match (e.g., "AAL"). If it finds one, it outputs the airline name instead of the code (e.g., "American" instead of "AAL").
* **Aircraft type** – If the aircraft is a **prop**, the pilot needs to maintain **3,000 feet**. If it is a **jet**, it will maintain **5,000 feet**.
* **Departure & Destination** – Searches airports.csv for the code. If found, it uses the latitude and longitude to calculate a heading from departure to destination.
* **Route** – This is checked because some pilots accidentally file **nighttime-only routes** or use a route they aren't allowed to.
* **Altitude** – Used for output, and also to ensure pilots are flying the correct heading for their altitude.
* **Squawk** – Only for the output text.

**Calculations**

* **Altitude vs. Direction of Flight**
  + If the pilot is flying **North or East** (between **000° and 179.999°**) and above **2,900 feet**, they must fly an **odd** flight level (FL) (e.g., FL290, FL310, FL330 up to FL390).
  + If flying **South or West** (between **180° and 359.999°**), they must fly an **even** altitude (e.g., FL300, FL320, FL340 up to FL380).
  + Once you get to **FL410**, the pattern changes: FL410 is for **NE** traffic, **FL430** is for **SW**, **FL450** for NE, and **FL470** for SW.
* **Other calculations are mostly formatting for output**, such as:
  + Converting codes to full names (e.g., "American123" instead of "AAL123").
  + Displaying full airport names (e.g., "San Francisco International Airport" instead of "KSFO").
  + Flagging restricted departures (e.g., preventing pilots from using **nighttime-only** routes when they aren’t allowed).

**CSV Files**

* **airlines.csv** – Used for looking up airline codes and outputting the full name.
* **airports.csv** – Contains airport codes, names, and latitude/longitude for calculating flight direction.
* **routes.csv** – Contains a list of departure routes:

| **ID** | **Route** | **Fix** | **ALL** | **Time** | **VFR/Prop** |
| --- | --- | --- | --- | --- | --- |
| (ID) | Route name | Fix name | (Unused) | "T" = time-bound (nighttime-only), "N" = not time-bound | "JT" = jets only, "VP" = VFR, props, and all others |

**Notes**

* I need the **inputs from GUI.py**, and I prefer its style.
* I'm **struggling to transfer the calculations over** and switch from lists to using CSV files instead.
* The **VFR tab** will look similar except you leave out th route. And the script will lok like this.

(callsign),

Cleared into the Memphis Class Bravo Airspace,

Maintain VFR at or below 2500. Departure frequency 125.8, squawk XXXX

* The output format needs to be changed so it says:  
  **"via {route} departure, {fix} transition,"** instead of combining them the way it does now.