

GTE Flight Planner in Cirrus

From the DUATS Command List (see figure 1) scroll down to Flight Planner highlight then double click on the Flight Planner and fill in all the required data.



Figure 1

The GTE Flight planner is easy to use and can help you plan a safe flight, and best of all it is **FREE**. The Flight Planner may be directed to automatically produce a route from a departure airport to a destination airport, or it may be given a departure, user provided route and a destination. There are four automatic route processes and one manual route option available. It utilizes the full FAA database of airways, airports, and navigation aids to rapidly compute the shortest route. It automatically takes advantages of the up-to-date winds aloft and temperatures data to provide corrected course and heading information, as well as true air speed and ground speed. Please remember that the flight planner is only a tool to assist in planning a safe flight. **(WARNING): The planner does not take into account obstacles, terrain, controlled airspace, and special use airspace, either shared or is issued by NOTAM. It does not include reserve fuel in its calculations.** You also must verify the suggested route against current aviation charts to ensure it can be flown safely. When you enter the flight planner, you are prompted for the required information one item at a time. If you need assistance while in the Flight Planner just press the F1 key, the Help screen will appear.

The first window will prompt for: See figure 2

Departure time (UTC) hhmm, +mmmm, or "NONE" for no wind-plan: (i.e.) 0634 or "NONE"

Altitude: Enter the Cruise altitude for this flight. (i.e., 12000)

Enter aircraft tail number: (i.e., N112QC)

Either 3 or 4 letter identifiers are accepted:

Departure: (i.e., LAX - KLAX)

Destination: (i.e., LGA - KLGA)

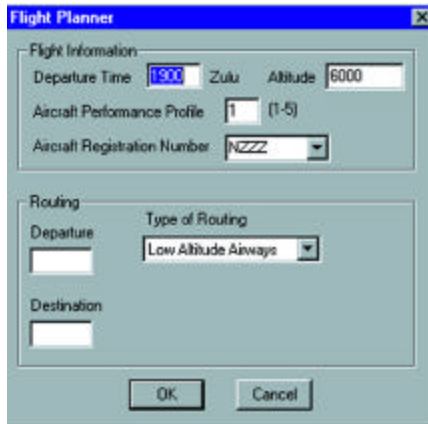


Figure 2

Aircraft Performance Profile:

Enter the number associated with the stored profile of your choice. If you have stored performance information for this aircraft the planner will retrieve this information automatically. **If you do not have your aircraft performance information in DUATS you need to add this information.** Please refer to the news article Aircraft Performance Profiles for additional help.

Type of Routing: There are four types of auto-routing available and one for pilots input. This is a pull down menu,

simply click on the arrow and see the menu selection.

Low-Alt Airway Auto-Routing
 VOR-Direct Auto-Routing
 Direct Routing for LORAN
 Direct Routing for RNAV
 User Selected Routing

Low-Altitude Airway Auto Routing: Selects the shortest path from your origin to the destination using low-altitude (Victor) airways. No attempt is made to circumnavigate airway segments which travel over high terrain, nor airway segments on which bad weather is present. It may not be possible to be provides automatic airway routing for certain airports which are very remote from any navigational facilities.

VOR-Direct Auto Routing: Is similar to Low-Altitude Airway Routing except that direct paths between VORs which are within reception range of one another are used in addition to Victor airways. Note that most of the route segments in a VOR-Direct plan are likely to be Victor airways, since there are Victor airways between most VORs which are within reception range of one another. Direct paths between two VORs will be chosen only when the VORs are within reception range of each other given standard navaid service volumes and when

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the direct route would be shorter than an airway routing. Note that terrain and restrictions on usability of VORs is not taken into account.

Direct Routing for LORAN/GPS and Direct Routing for RNAV:

Compute a great-circle route between the origin and destination and then locate a number of waypoints along that route. The waypoints are defined by nearby VOR/DME facilities, and a radial and distance from the VOR/DME to the waypoints is provided. The flight plan generated by LORAN and RNAV direct routing is identical, except that for the RNAV option, the distance from the VOR/DME to the waypoints is adjusted for slant-range error.

User Selected Routing: After selecting user defined route, a dialog box will appear, press <tab> your cursor will appear and you will then be able to enter the data for your selected route. You can enter nav aids, transitions, airports, and even latitude and longitude. Through user selected routing you may even request auto-routing on Jet "J" airways. To enter a "J" route simply type in a SID or appropriate transition for the departure airport, a * J, and a STAR or appropriate transition for the destination airport and GTE DUATS will automatically generate your Jet route. EXAMPLE: (SLI3.SLI *J ETG. MIP1). DUATS will provide the following:
KLAX SLI3 SLI J78 DRK J10 FMIV J64 ALBRT J18 JOT J146 ETG MIP1 KLGA

Once you have selected one of the flight planner routing options, the planner will compute the optimum route. This route will be displayed, along with the distance along the route. If this route is not a great-circle route, for comparison purposes, the great-circle distance will be shown, as well as the percentage by which the planned route is longer than the great-circle distance.

The Flight Planner also provides the Flight Totals for Fuel burn, Time enroute and Distance.

Aircraft Performance Profile

To save or add a profile, select Interactive Logon (see figure 3) from the GTE DUATS menu tool bar highlight and click once. The DUATS system will automatically dial into the GTE DUATS system. After you been connected, follow the screen prompts. Enter your

access code then hit "enter" this will take you to the DUATS Main Menu.



Figure 3

Select the number ' 2 ' from the GTE DUATS Main Menu to display the Flight Plan Menu, now select number ' 7 ' Modify Flight Planner Profile:

This will display the next menu: Planner Aircraft Update, Select number ' 1 ' Available Aircraft profiles: This is where you store your performance data.

Select the number ' 2 ' Add new aircraft profile: Remember you can store up to five performance data profiles.

Enter a profile name: (i.e., Cessna 182, C182, etc.) You will be prompted for the following.

Fuel units: gallons, pounds, kilometers

**** Climb profile ****

Rate of climb (feet/minute): 500
Climb speed (knots or Mach number): 110
Climb fuel consumption (gallons/hour): 12

**** Cruise profile ****

Cruise true airspeed (knots or Mach number): 135
Cruise fuel consumption (gallons/hour): 10

**** Descent profile ****

Descent rate (feet/minute): 500
Descent speed (knots or Mach number): 135
Descent fuel consumption's (gals/hour): 8

Profile for CESSNA 182:

	gals/hour	rate ft/min	speed
Climb	12	500	110kts
Cruise	10		135kts
Descent	8	500	135kts

Store this profile [Y/N] ? [Y]

Abbreviated Weather Briefing Coming Back to DUATS

By popular demand GTE is adding Abbreviated Route Weather and Abbreviated Radius Weather to DUATS. Along with the Abbreviated Weather for Selected Locations you can now streamline weather briefing with just the weather types you want to see. If you look closely at the weather menus, there are several that specify "Abbreviated". Select a function you want to use just follow the prompts, and when you get to the prompt "Select

Weather Items:" simply select in the report types you desire. In Cirrus these are simply selected by clicking on the weather type and a check will appear.

Lets take this information and see how we can apply it to obtain a neat tailored weather briefing to meet your needs. Abbreviated Location Weather will provide you with only the selected weather types specifically for the location identifier(s) entered. You can enter up to 10 location identifiers. Abbreviated Route Weather allows for selected weather to be displayed for all reporting locations within a selectable corridor width of 10 NM to 100 NM. Abbreviated Defined Radius Weather allows for selected weather to be displayed for all reporting locations within a selectable radius of 10 NM to 500 NM. In any of the abbreviated briefings the selected weather type will only be displayed if it is reported by a location.

Modem Q&A

Question : Why does my 2400 baud modem fail to connect with DUATS, even though I can connect with other online services, or if it does connect, why does my screen fill up with strange characters?

Answer : In October, the DUATS modems and phone service was upgraded to allow modem connections up to 28,800 bits per second. The manufacturer of our new modems informed us in mid-December that the models we had put online suffered from a defect which affected some V.22/V.22bis modems when connected to long local phone loops. In plain English, our new modems would have difficulty connecting with some 1200 and 2400 baud modems. We installed new modem software on Dec 31, 1996. Spot checks with our 2400 baud customers who were experiencing difficulty has indicated that this problem is fixed with the upgrade.

Question : Why do I only get a blank screen when I connect to DUATS?

Answer : Our modems communicate with the DUATS host computer via a network interface. Under heavy load, the communications between an individual modem and the network device would fail. This would allow the modem to answer incoming calls, but would prevent all data from passing between the modem and our host computer. The modem software upgrade which was completed on Dec 31, 1996 corrected this problem, and we have not noted any modems in this condition since that date.