

## A NEW FRIEND (v1.0.7)

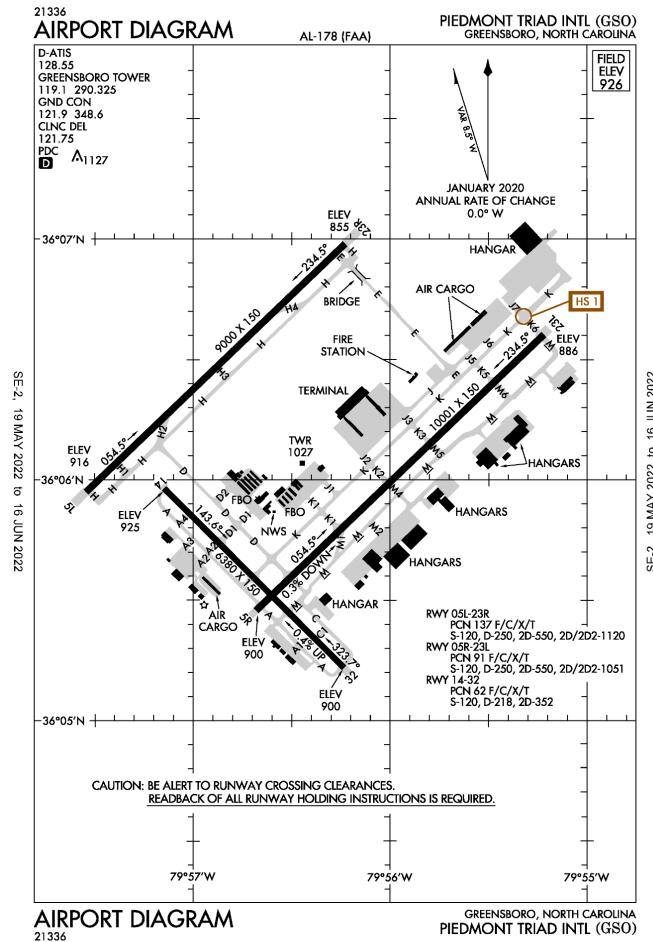
We've just taken delivery of our brand new HJET in a beautiful E2 Flat Black Livery , marveling at its beauty while standing at the delivery area of KGSO. Friends and family will be waiting for you back home at Wilmington INTL to celebrate the arrival of the new family jet.

Keybindings for additional events can be found [here](#):

 HJet Control Bindings v2.1

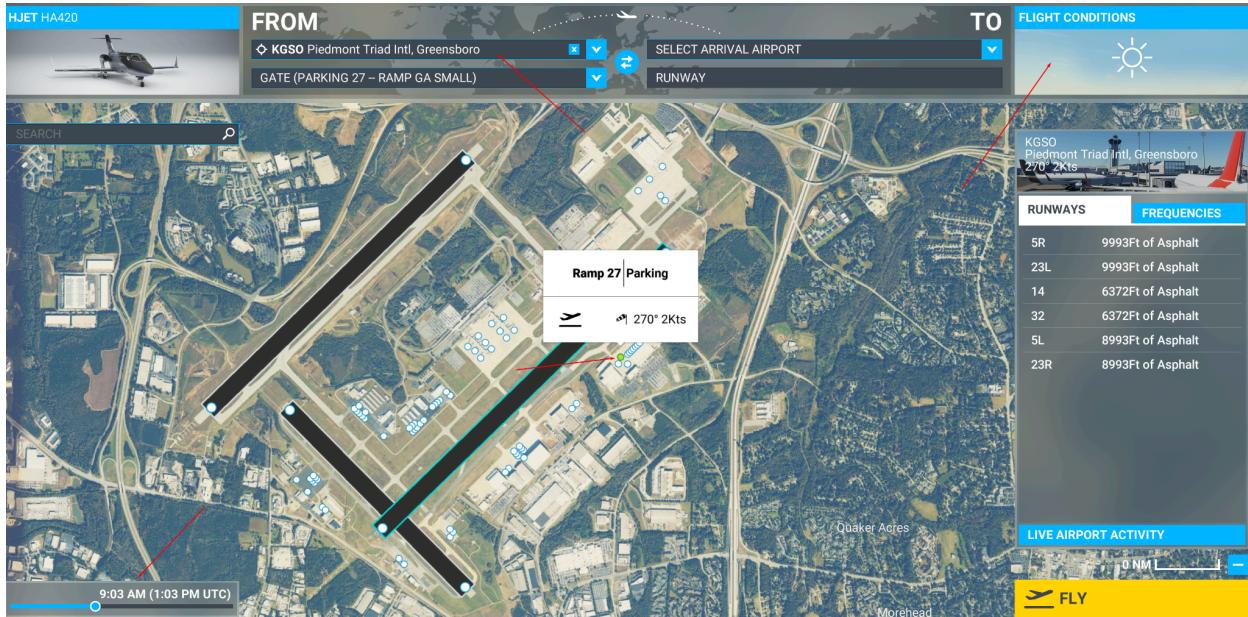


It is a beautiful sunny day , so let's hop in .

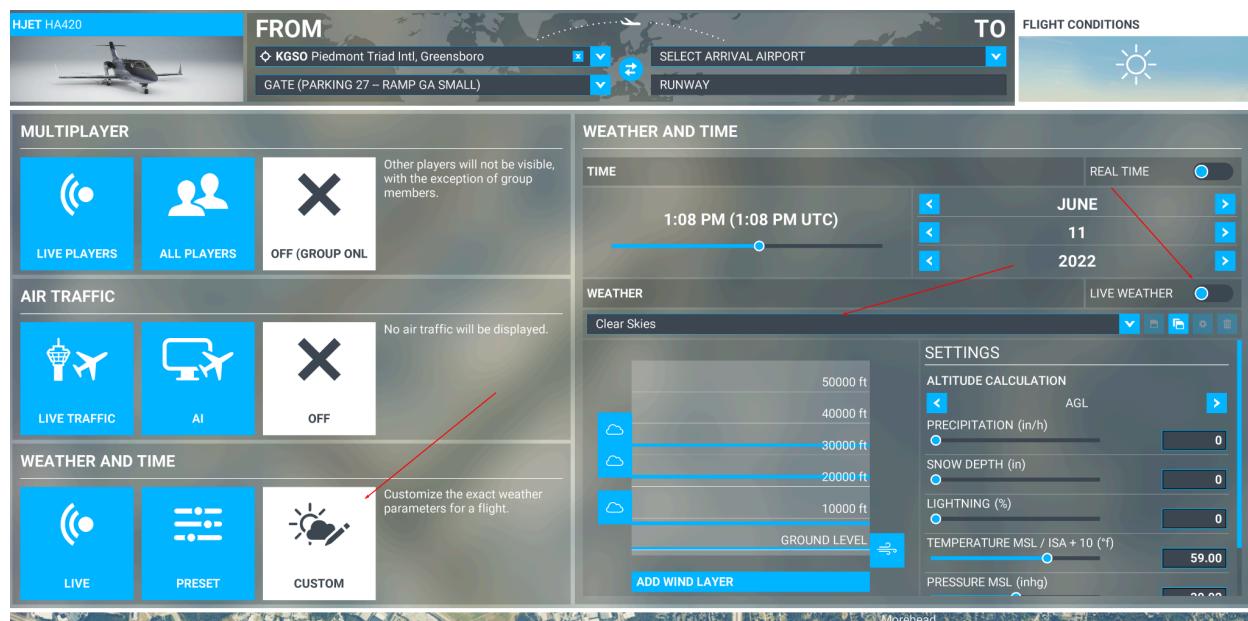


## SIM SETUP

After Selecting you HJet and Livery Search in the bar for KGSO and “zoom” in to field Level and select RAMP 27 Parking as the Departure. We will add nothing else into the world map flight plan as we will be loading that FPlan in the G3000 Manually. Once selected for departure set the time to 9am local and then click on flight conditions.



For the Tutorial we will turn Live Weather Off and set the Weather to Clear Skies.



We are also going with Multiplayer and Live Traffic Off so that we can limit distractions or variables that would take you off the tutorial plan. Once you have flown the tutorial and have an understanding of the basics you will be ready to jump back into your preferred settings. Next let's set a couple parameters in our Clear Skies.

We are going to look at the Weather section and scroll down to set the Pressure MSL to 30.02 so that we have to use the STD Pressure and altimeter settings later in flight.



Now Click on the Wind Icon at Ground level so we can Set Up some wind on the ground to favour our tutorial runways today which are 23L and runway 24. We will give a little offset to it.

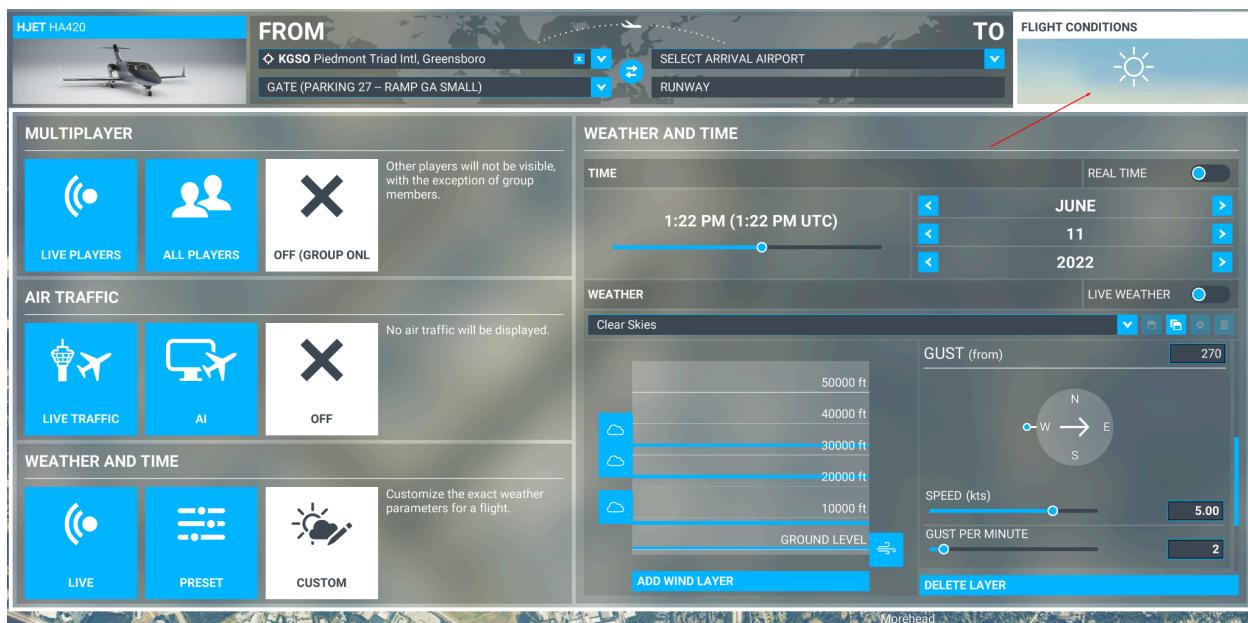


Set the wind to come from 270 and a speed of 5 Knots so that we have slight cross and low speed.

Scroll down in the right pane further and set the Gust from 270, speed of 5 Knots and Gust per Minute to 2.



Now Click on the Flight Conditions again to hide the menu



Now Hit that Fly button in the Lower Right Side!!



## FLIGHT PLAN

We start by setting up a flight plan, we can do so either through the MSFS world map menu, or the hard way, creating our flight plan through SimBrief.

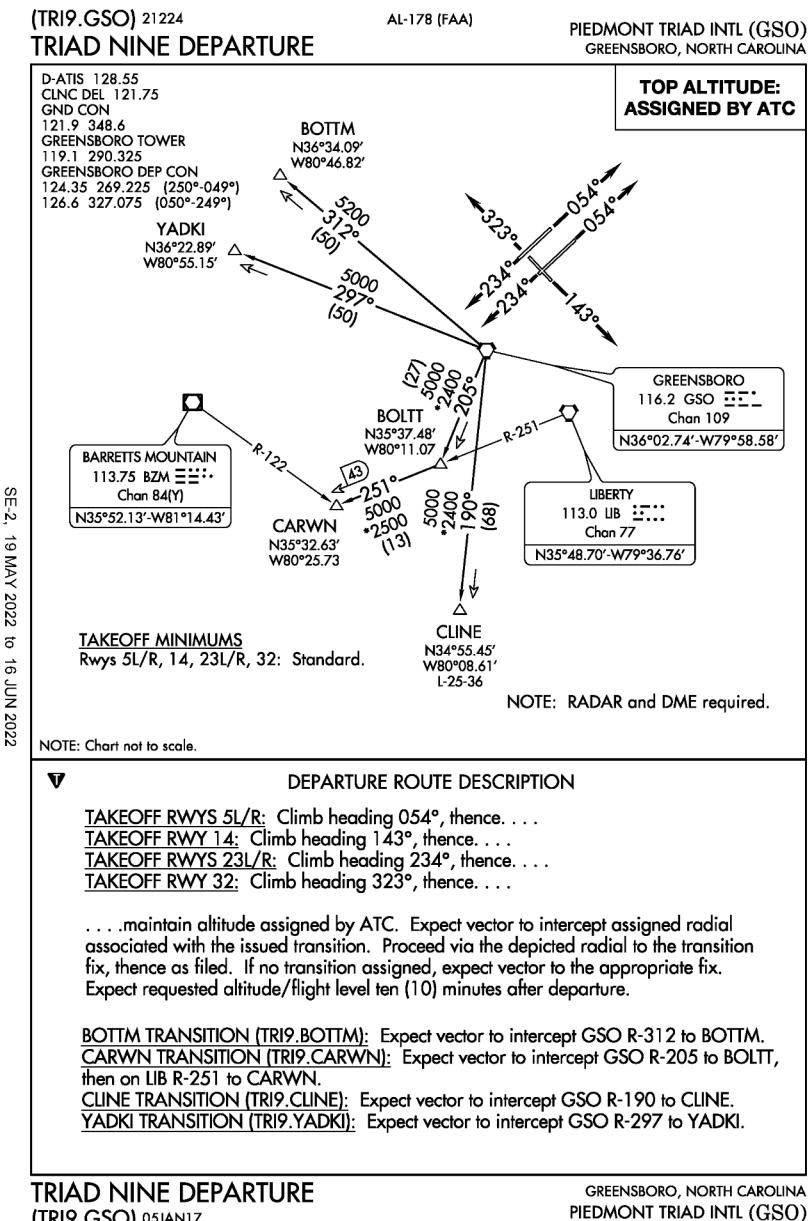
<https://www.simbrief.com/>

Our flight plan for today is:

**KGSO/23L TRI9 CARWN DCT FAY V296 YOAST DCT KILM/17**

We will be Cruising at FL310 or 31,000 Feet (Altimeters set at 29.92)

Departure Chart:



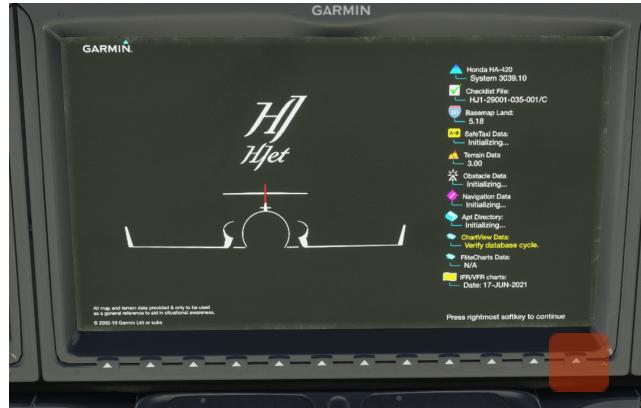
## ENTERING THE COCKPIT

There is a philosophy of the HJET addon reflects the same as the real counterpart, Simplicity and automation of much of the operations , will expand on that in a moment, for now let us start by turning on the battery to connect power:



We are immediately greeted with a party of lit screens, now let's get to know them,

first press the rightmost button of the MFD to dismiss the splash screen



1. Synoptics Display
2. PFD: Primary
3. EIS: Engine Instruments and Status
4. MFD: Multi Function Display
5. VSD: Vertical Situation Display
6. GTC1 : Garmin Touch Controller 1
7. GTC2: Garmin Touch Controller 2
8. Standby Instrument



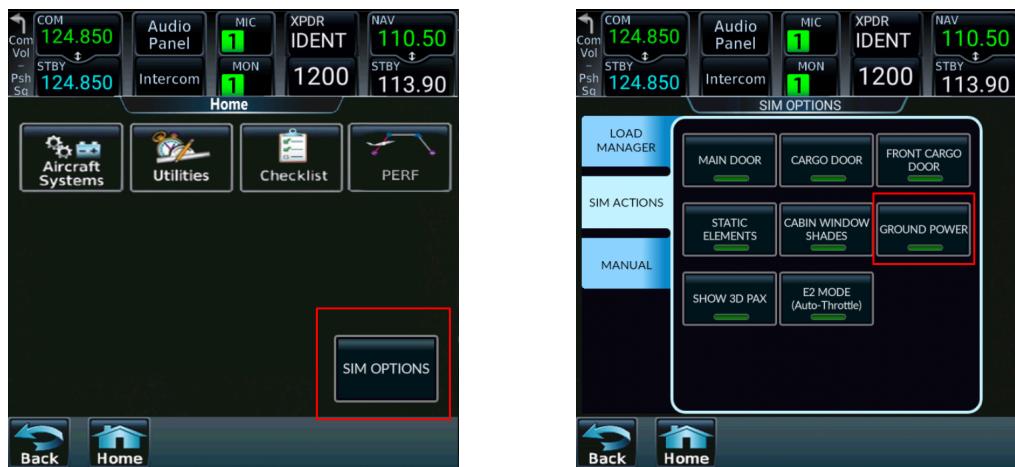
## CONNECTING EXTERNAL POWER

Our bright screens consume a lot of energy , and will quickly consume the batteries if this is the only existing power source.

For this , we have a trusty orange ground power unit that will feed the HJET's power needs until the engine generators are on . (Note for v1.0.4 no longer connected to Parking Brake)

GPU is automatically available when :

- GPU Connected in Sim Options Menu on the Right GTC - Sim Options
- Engine Generators are offline



If available, the “External power button” will light with “AVAIL” , press it to connect external power. It’s status should now turn to “ON” indicating that it is working



## GARMIN TOUCH SCREEN PHILOSOPHY

**The Way the HJET Addon is set up is as follows:**

GTC1: Left Unit used for all flight plan interactions, and control of MFD

GTC2: Right Unit used for all aircraft and systems interaction

**NOTE:** GTC1 and MFD are provided by integrating the Working Title G3000 .

Now, to begin the actual flight:

## STEP ONE : LOAD MANAGER

Once power is connected to the aircraft for the first time, you will be greeted with the SIM OPTIONS PAGE of GTC2:

- Press on a passenger icon to toggle passenger, enabled (Green) or disabled (Gray)
- Press on any of the cargo compartments indicator to adjust their weights.
- Use the buttons labeled +/- 100 or +/- 500 to adjust the fuel level

**NOTE:** All Values entered into the Load Manager will overwrite the sim W&B however due to limitations of the Sim the Menu for Weights will not Update to reflect these changes.



We'll go with a pilot, copilot , and 25% cargo .

Zero to fuel weight is 7700 Lbs. and we will load 1800 Lbs. of fuel.

## NEW FOR VERSION 1.0.7 – E2 Mode

- Adds Auto Throttle
- Adds 500 LBS Useful Load Including 300 LBS More Fuel
- Adds Auto Spoiler Deployment on Touchdown + Brakes

You can also press the "SIM ACTIONS" Tab for accessing doors controls, static elements, window shades, ground power and making 3D passengers visible.

**NOTE:** Static elements can only be enabled if the parking brake is set and engines are shut off. The Doors will only work if the Engines are OFF.



## STEP TWO : INITIALIZATION

After completing the load out ,our next step is testing and initializing the weight of the aircraft, you can go to the next step by pressing the shortcut button “GO TO INITIALIZATION PAGE” or by Pressing **HOME** **UTILITIES** **INITIALIZATION**.



In this page, we will do the system tests, set up the aircraft’s weight and fuel and set our speed bugs.

Press “System Tests” to enter the System Tests page , where we will be performing 3 tests:

- Fire Detection
- Stall protection
- Switch illumination



You can do each test individually, by pressing each respective test button , or just simply click the “Preflight” button which will sequence through all tests. You will see tests labeled “In progress” and once completed they will be labeled “Done”



Press “Back” to go to the initialization screen , you’ll notice a green checkmark is now present in front of the “System tests” icon indicating that all tests have been completed.



We now press to “Weight and Fuel” to initialize the aircraft’s loads,

There are multiple tabs in this page where pilot is expected to enter the weights of the following:

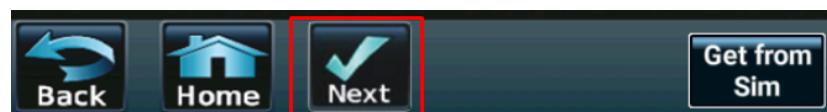
- **Operating weight:** Crew and stores (pilot weights and any additional constant loads on the aircrafts)
- **Payload:** Passenger counts and average weight of each , Cargo weight
- **Fuel:** Fuel on board
- **Takeoff:** estimated taxi fuel

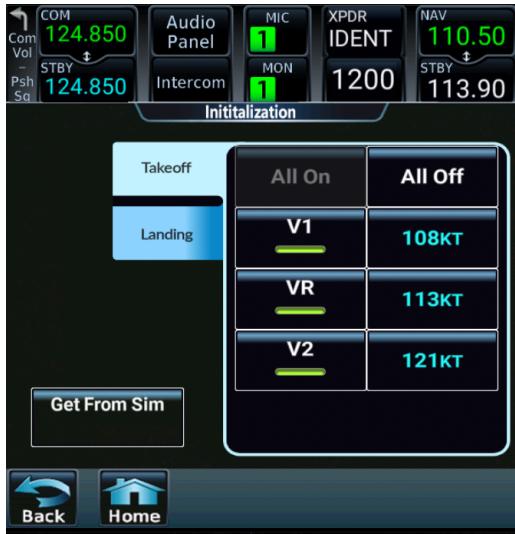


**TIP:** You can enter each of the above fields manually **OR** you can press the shortcut button “Get from Sim” On any of the tabs, and the field on this page will be automatically populated based on the information from the “Load Manager”

After all fields are populated , a “Next” checkmark button will appear .

Press it to go to the next step of the pre-flight , V-speeds.





On this page, You can enter the V-speed corresponding to V1,VR & V2 .

Once entered, you can turn each on individually (ie.shown of PFD) or simply press “All on” to show them all on the PFD.

V1: The speed beyond which takeoff should no longer be aborted.

VR: The Rotation speed for the current aircraft configuration.

V2: Takeoff safety speed. The speed at which the aircraft may safely climb with one engine inoperative

**TIP:** You can enter each of the above fields manually **OR** you can press the shortcut button “Get from Sim” On any of the tabs, and the field on this page will be automatically from internal look up tables. Keep that V2 speed handy as we will need to add 10 knots to it in a little bit!

And that concludes the initialization phase.. Press Back Button and Then Accept Initialization!



### STEP THREE : FLIGHT PLAN ENTRY

Inline with the above mentioned “Touch screen Philosophy” We now turn our attention towards GTC1 (Left touchscreen)

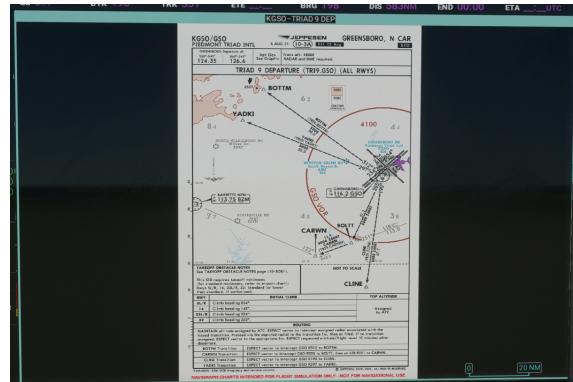
Our flight plan was **KGSO/23L TRI9 CARWN DCT FAY V296 YOAST DCT KILM/17**

- Press “flight plan”,
- Enter “**ADD ORIGIN**” as “**KGSO**” and “**ADD DESTINATION**” as “**KILM**” as per our flight plan.
- We will take the TRI9 standard instrument departure from runway **23L** , so lets press “**PROC**” from the leftmost menu to open the procedures screen □ press departure
- Choose departure as “**TRI9**” and runway as “**23L**” and transition “**CARWN**” , you can preview the departure on the MFD by pressing the “**PREVIEW**” button □”**SHOW ON MAP**” , or you can preview the chart for it by pressing “**SHOW CHART**”





Preview on map



preview on chart

**Note:** Charts are provided courtesy of Navigraph and Working Title. An active subscription to the Navigraph service is required for this functionality. To log in to your Navigraph account :

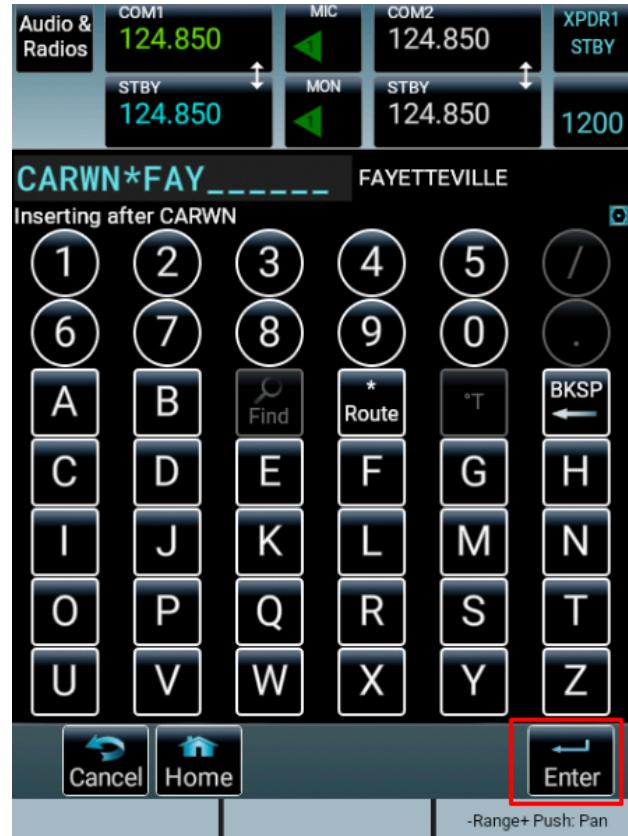
Left GTC □ Home page □ Utilities □ Setup □ Database Status □ link account

Once satisfied, we can turn Preview off by again pressing “Preview” □ “off”

We are happy with the chosen Departure (SID), so press “load” to load in all that hard work, The departure procedure is now loaded.

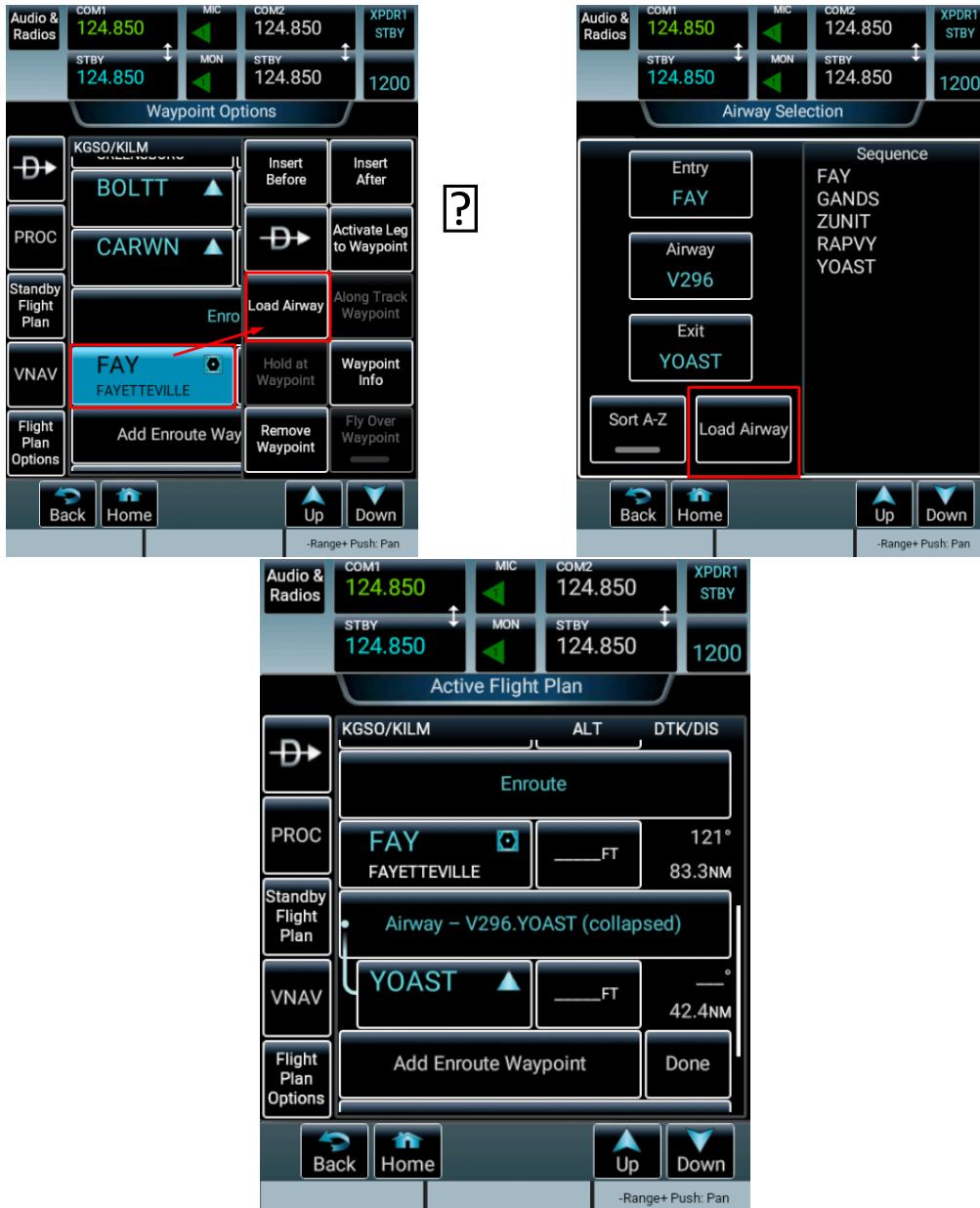
We see it when we go back to the flight plan page.

Now to enter the next enroute waypoint **FAY** , press “Add Enroute Waypoint” and enter **FAY**.



Next, we are traveling to waypoint **YOAST** from **FAY** via airway **V296**

To add the airway, press the entry waypoint **FAY** “Load Airway” “Airway” **V296** .. Then press “EXIT” to choose the exit point **YOAST** “Load Airway” .. this will take us back to the flight plan page with the airway added



That concludes the flight plan section for now, will come back to it later during cruise to set up the descent and approach, we've added a DCT point **FAY** and an airway to point **YOAST**

## STEP FOUR : PREPARING THE AUTOPILOT AUTOMATION

With this Departure we will “simulate” that KGSO Clearance Delivery has issued us our IFR Clearance as filed and with an unrestricted climb all the way up to our filed Altitude of FL310.

The TRIAD NINE DEPARTURE (see appendix for copies of the Charts) for Runway 23L is the Following

- Take Off Runway 23L and climb heading or 234 deg
- Normally this would then have ATC Radar Vectors to the GSO VOR
- Resuming FMS Navigation from GSO VOR to BOLTT then CARWN

The GFC panel at the top middle of the Glareshield is what the pilot uses to enter the commands for the Automation system. All Modes and Information is found on the PFD in the Annunciator or FMA region. For more detailed information see the Garmin G3000 Pilot's Handbook links in the Discord.



- With the HDG SEL Knob set the Cyan Blue HDG Bug on the top left of the HSI to 234 deg
- With the ALT SEL Knob set the ALT Cyan Blue ALT Bug On Top of the Alt Tape to 31,000 (long time)
- With the SPD SEL Knob set the SPD Cyan Blue SPD Bug On Top of the the Speed Tape to V2+10

We are ready to start the engines , but first let's go through our checklist

## THE CHECKLIST

### Accessing the Checklist:

You can access the checklist through one of two ways:

- GTC2 □ Home □ Checklist
- Or simply pressing the thumb wheel on the pilot yoke

**Tip:** Pressing the thumbwheel for 2 seconds will hide the checklist and take you back to the previous Synoptics page on the PFD



### Using the checklist:

You can scroll through the checklist by one of three ways:

- Scroll GTC2 right most knob
- Scrolling the thumb wheel on the pilot yoke
- Keybindings (see keybindgs Doc  
<https://docs.google.com/document/d/1FnDKIKKeVm8yFkKjqKo4ySdSDU0pOZ1AoLAXcIIOBeIQ/edit?usp=sharing>)

To acknowledge an item , you can do it in one of three ways:

- press the GTC2 right most knob once
- press the thumbwheel on pilot yoke
- Keybindings (see keybindgs Doc  
<https://docs.google.com/document/d/1FnDKIKKeVm8yFkKjqKo4ySdSDU0pOZ1AoLAXcIIOBeIQ/edit?usp=sharing>)

### Choosing a checklist:

GTC2 will allow you to select a checklist for any phase of flight , pressing any of the checklists buttons will display this checklist on the PFD



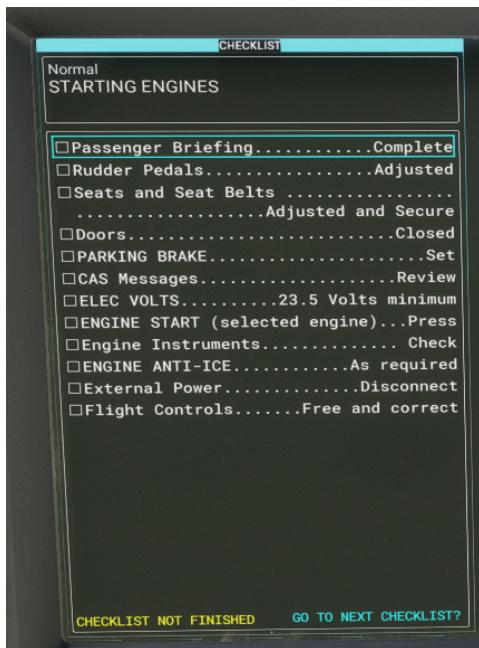
OR if acknowledging all items on a checklist; the cursor jumps to “go to next checklist” which when pressed will take you to the next checklist in the sequence.

The cockpit philosophy is that all buttons are either dark or NORM .

We are now looking at the before start checklist, the following diagram will help identify where everything is:



After all the checks are a go , we are now ready for engine start now we proceed to the **start engines checklist**



Let us cover some new items on this checklist:

- **Doors:** Can be controlled from GTC2 □ Home □ SIM OPTIONS □ SIM ACTIONS TAB
- **CAS Messages:** we should be seeing only engine related warnings on the PFD
- **Electric Volts:** Look at the Electrical synoptics page on PFD . to access synoptics page: GTC2 □ HOME □ Aircraft Systems □ Electrical

You should now see electrical synoptics on PFD, check battery voltage is above 23.5 Volts:



- **Seats and Seat Belts:** To control seat belts and no smoking:  
GTC2 □ HOME □ Aircraft Systems □ System Controls □ Interior Lights □ Fasten Seatbelts, No Smoking



NOTE : The Seatbelts and No Smoking are connected to the Simulator A:Vars with v1.0.6. Hardware and software that interacts with those fully work.

## ENGINES START

We'll start with the right engine #2:

1. Drag the throttle lever of engine #2 from the **CUT OFF** detent to the **IDLE** detent (v1.0.4 added Click Spots below the Throttles but just above the Pedestal switches see second image with Red Rectangles.).
2. Press the right engine START button , it should light green and the engines will start coming to life,



3. Monitor the EIS during engine startup, the FADEC will do all the work to ensure the startup parameters are not exceeded you should see STARTER then IGN , and also the throttle mode will be shown in cyan START



4. It takes 20 seconds for an engine to start(It is that fast!) , will idle at around 23% N1 and 52% N2
5. Repeat the same for engine #1

**NOTE 1:** While the Throttle is in Cut off position , external hardware will not be able to control the throttles and you will see no effect trying to move the throttles with either keyboard or joystick , you must take it out of Cut off position by dragging each lever to IDLE

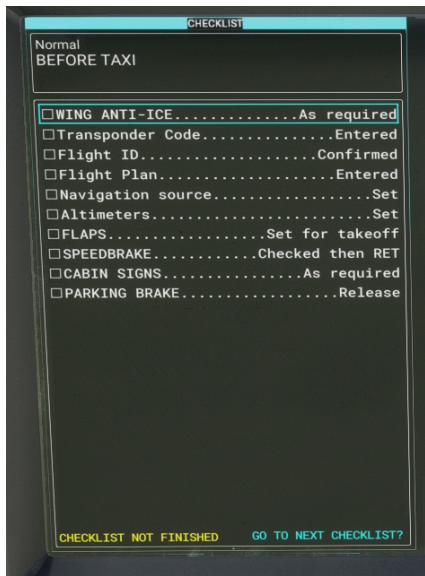
**NOTE2:** If you try the MSFS quick start shortcut Ctrl+E while the engines are in idle , this will introduce a conflict and you will see flickering as the engines are trying to start but being cut off immediately, you must move the throttles to the IDLE detent.

**NOTE 3:** Once engines are running , generators will automatically come on , this will disconnect the simulated GPU

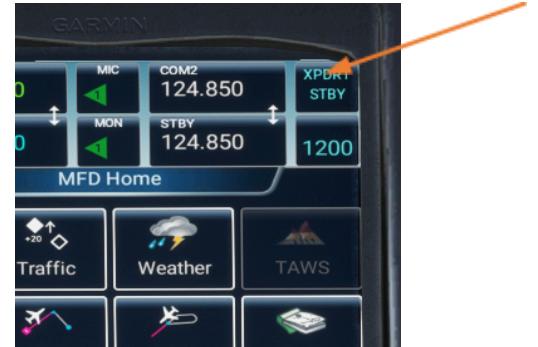
After visually checking the flight controls , we now proceed to the before taxi checklist.

## BEFORE TAXI

We will now complete our before Taxi checklist



**NOTE:** When Setting the Transponder Code on the Left GTC it is important to also select the XPDR1 Mode Button Above the Code to open up the Transponder mode Screen and set the mode to ALT Reporting or TA Only. TA Only will still report ALT but it will also give you Traffic Advisory, the ONLY refers to there being no Resolution Avoidance provided.



### Let us address some essential items:

- **Navigation source.....set:**

- To choose a navigation source press the Active NAV soft key on the PFD , this will toggle between FMS, NAV1 & NAV2 .

Set it to **FMS**



- **Altimeters:**

- There are 3 altimeters on the HJET (2 are functional in sim: pilot and standby )



- The altimeter for our particular flight today is 30.02 (if you are using live weather or a preset use the baro setting from the metar menu) , use the Main baro knob to set it.

**NOTE:** To change from IN to Hpa press the softkey

PFD SETTINGS □ OTHER PFD SETTINGS □ ALTITUDE UNITS

OR on the Backup click on the HPA/In button as they are linked in v1.0.6

- **Flaps:**

- Takeoff flaps setting for the HJET is in the TO/APPR detent

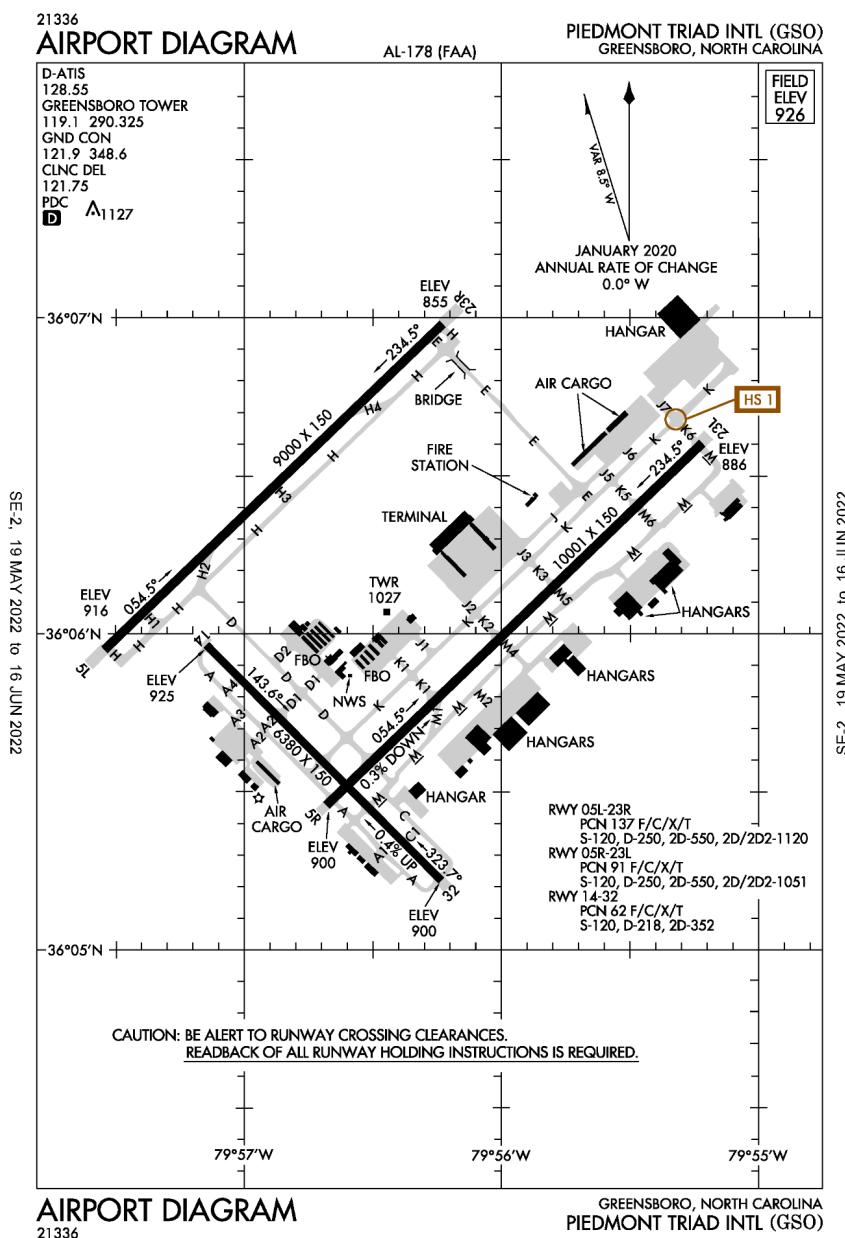


We've completed the before taxi checklist , we move on to the TAXI checklist..

TAXI

The taxi checklist is a rather short one, we release the brakes, start moving, check the Nose wheel steering is on and working. Check Flight instruments to see that they are showing turning on the HSI HDG and the Slip indicator is moving.

NOTE:Break out N1 on the real jet is around 30~35% N1 depending on the weight , you will need 40% for the simulated version



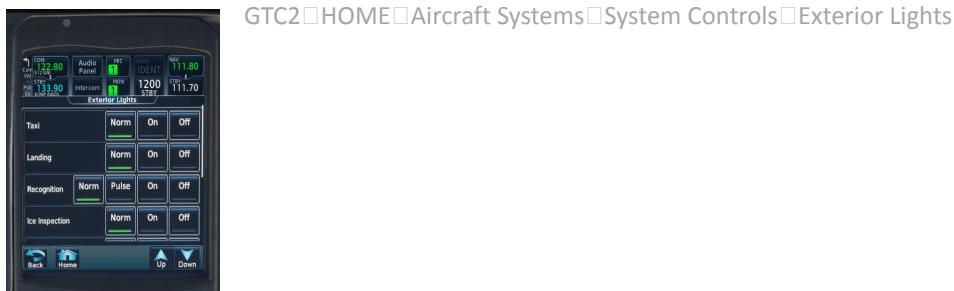
We are taxing to runway 23L via Taxi way Mike , short and convenient

## LIGHTING

You'll notice that till now we haven't spoken about lighting , even though we already started the engines and already started taxing .

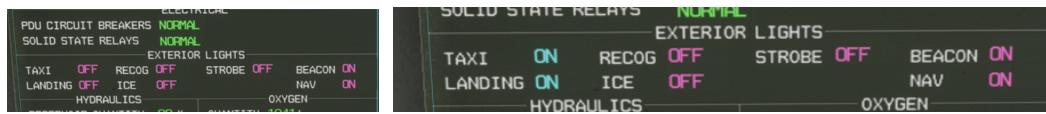
A beautifully convenient system on the HJET is the automatic lighting system , where the aircraft will manage the lighting for you according to a predefined set of rules..

### To access external lighting page:



### The Philosophy:

- Any light on Norm will be managed automatically by the aircraft and will be displayed in **Magenta** on the status synoptic page .
- Any light on On/Off is manually controlled, and will be displayed in **Cyan** color on the status synoptic page, examples below



### Automatic activation conditions (Sim specific):

- **Taxi lights:**
  - When on ground and ground speed is more than 5 kts
- **Landing lights:**
  - When on ground and on any runway , or throttle above 70% or speed more than 35 kts
  - When airborne and gear is down
- **Recognition lights:**
  - If airborne altitude is less than 18000 ft
- **Ice inspection:**
  - If in icing conditions
- **Strobe:**
  - When on ground and on any runway , or throttle above 70% or speed more than 35 kts
  - When airborne and gear is down
- **Navigation:**
  - When power is established
- **Beacon:**
  - At Least one Engine is running
- **Logo:**
  - When power is established and alt is less than 18000 ft

## BEFORE TAKEOFF

Holding Short of runway 23L we complete the before takeoff checklist.

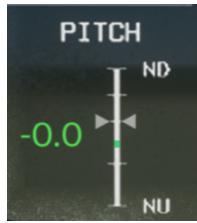


### Critical checklist items:

- **Trims .. set for takeoff:**

- Take off is very sensitive to trim , and a prerequisite to a successful take off is trimming the elevator to the green band; the indicator triangles will also turn green to signal you are in the correct trim range. The range changes based on the configured flaps.. see below examples:

Example of wrong takeoff trim



Example of correct takeoff trim



- **Flight Guidance..Set:**

- Press the **TO/GA** button to Set the Flight director to TO/GA (Take off / Go around mode) , this will fix the flight director at 11 degrees pitch up and straight ahead green **TO** will show on both vertical and horizontal autopilot annunciator on the PFD. To be followed during takeoff



Let us verify our Altitude Preselector is set to 31,000 ft, speed bug set to V2+10 and Heading Bug Set to 234 deg.

- **ICE Protection:**

- If in icing conditions , turn on engine anti ice , otherwise set to **OFF**



- **Radar (Working title feature):**

- To turn on weather radar :

GTC1 □ HOME □ WEATHER SELECTION □ WX RADAR SETTINGS □ RADAR ON ... DISPLAY □ WEATHER



NOTE: to get back to the map view : GTC1 □ HOME □ MAP

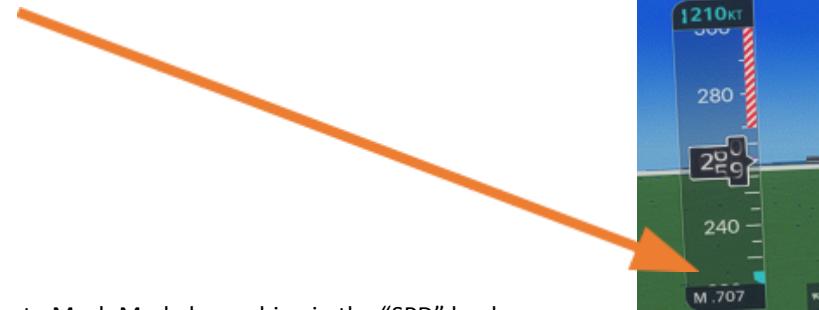
Now it is time to finally take to the skies !

## TAKE OFF

- Push the toe brakes in,
- Push the throttles to the T/O detent, the FADEC will calculate and apply maximum take off thrust. Release brakes, watch engine parameter during acceleration run, remove your hand from throttle once past V1 speed.
  - **NOTE for E2 Mode and Auto Throttle:** Alternate to Setting TO Thrust Manually the AT Button on the Panel may be Pressed. When the TO/TO Mode is Active Arming of the AT (auto Throttle) on the GFC-700 will result in the AT system activating and Moving the Levers to TO Thrust Position.
- Start rotating at 113 kts our Vr speed, slowly rising up to meet the flight director at 11 degrees pitch in 3~4 seconds. which will maintain us around 140 kts
- Tap the Brakes and Retract the gear after achieving a positive rate of climb. When clear of obstacles and at no less than 130 KIAS retract the flaps. Confirm the gear and flaps are retracted on the EIS.
- Retard the thrust levers to MCT detent Once you pass 2500 ft MSL (1500 ft AGL) and lower the pitch to accelerate towards the climb speed of 210 kts.
  - **NOTE for E2 Mode and Auto Throttle:** If AT is Armed this step will be handled Automatically when FLC Mode in the next step is selected. The AT will follow the Defined Climb Schedule when in FMS mode or you can Manually Set a speed by moving the SPD Mode Selector Ring from FMS to MAN on the GFC-700.
- We now engage Autopilot (AP), Engage Flight level change (FLC) and set speed bug to 210kts and press lateral navigation (NAV). The HJET will now track the flight plan and adjust its pitch to hold 210kts on its way to our cruising altitude of 31,000 ft.
  - **NOTE for E2 Mode and Auto Throttle:** If AT is Armed the selecting of FLC will direct the AT to maintain MCT and a speed of 210Kts.

## CLIMB

- Passing 10,000 ft: Passenger signs off.
- Passing transition altitude (18,000ft) : Press pilot baro knob to set standard altimeter of 29.92 In
- Climbing at 210 KIAS until Mach speed reaches 0.57M at higher altitudes. You can monitor your TAS on the bottom of the Speed Tape. As MACH increases the TAS display will automatically flip to show MACH speed



- Once 0.57M is reached switch over to Mach Mode by pushing in the "SPD" knob once, and ensure that the speed bug is set to 0.57M throughout the rest of the climb (All the way to the service ceiling of 43,000 ft if climbing to that altitude).
- Monitor the pressurization system, cabin altitude and watch for any CAS warnings,

**Note:** The IAS/MACH transition usually happens at around 31,000 ft so we MAY not need this transition to Mach for this particular flight as we already reached the cruising altitude of 31,000 ft on a 210 Kts profile however you need to monitor this based on conditions.

## CRUISE

We are now at our cruising altitude going to **FAY** .

31,000 is the altitude of fastest speed, where MCT will take us to around 420 kts True Airspeed (TAS), this is where the HA420 gets her name! Ground Speed will Depend on the Winds Aloft.

- **NOTE for E2 Mode and Auto Throttle:** If AT is Armed and the SPD MODE is in FMS then the speed will automatically set for 270 KTS / 0.720 MACH and Maintain that speed until next phase of flight.



## MSFS G3000 APPROACH ISSUES (IMPROVED IN VERSION 1.0.7)

It is a Simulator known issue bug that if at any point in your flight you modify the Flight Plan by performing Direct To or Activate Leg (which on a Flight Plan Like this would probably Happen...) you will run into an Issue where when the first leg of the Approach is sequenced the flight planner jumps to the last leg and the plane will start to fly to it.

This is also usually just after the sim flight planner system has to enter a USER waypoint after you last enroute waypoint and then links that to your first APPROACH waypoint and you will see it change the PFD to show USR now and no longer the previous waypoint name.



One of the ways to work around this would be to keep your Heading Bug Synced to your NAV Heading (just click on the AP Control HDG Knob) and be prepared to enable HDG Mode when the AP decides to “turn back”.....

Now turn your heading to “intercept” the Leg that would be from the USER waypoint to the first waypoint of the approach (Known as the IAF).

Now that you have done the “Aviate” portion to address the problem we can go to the next step of Navigating. On the Left GTC go into the FPLN Page and select the IAF Waypoint again to bring up the side menu and select the “Activate Leg to Waypoint” and once confirmed on the AP Panel enable NAV mode again. Once the AP intercepts the Leg it will go into FMS Mode (note if close enough the AP would skip FMS Arm Mode and switch instantly) and you will fly to the IAF and the Flight Plan Manager will resume the proper sequencing of the Approach Legs.

Update - with version 1.0.7 the plane should no longer turnback when it transitions to the IAF from the Enroute or Arrival waypoints. Additional Logic was added to try and counteract the sim bug in the flight plan manager however this won't be 100% until after AAU1 Avionics are integrated into the HJet. For now monitor this stage of flight and be prepared just in case.

## VNAV DESCENT

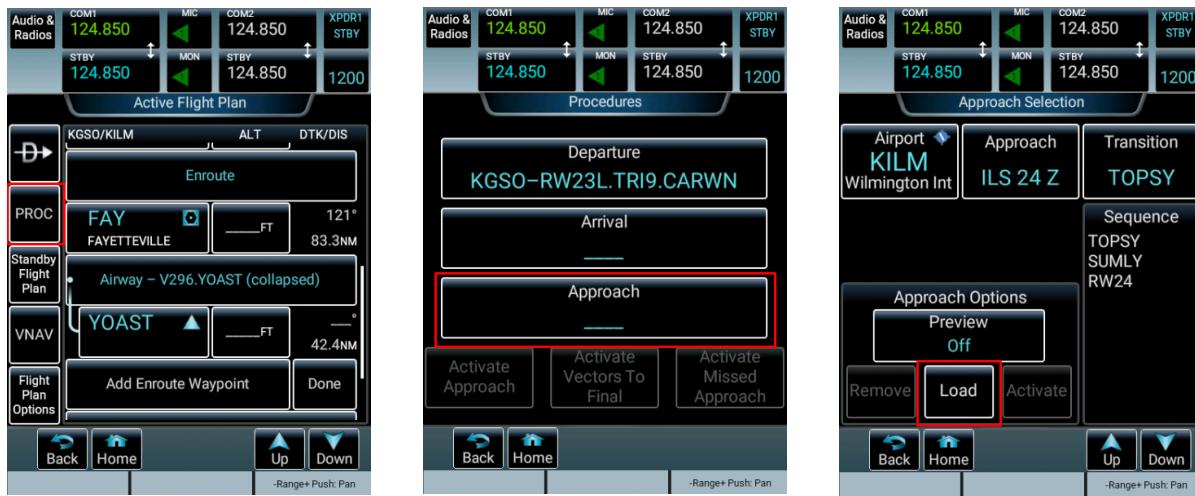
Time to set up vnav and patiently watch the TOD point for some action, but first we setup our approach into KILM,

We will use the **ILS RWY 24**

To set approach:

GTC1 Home Flight Plan Proc Approach Choose Approach **ILS 24 Z**

Choose transition **TOPSY LOAD**

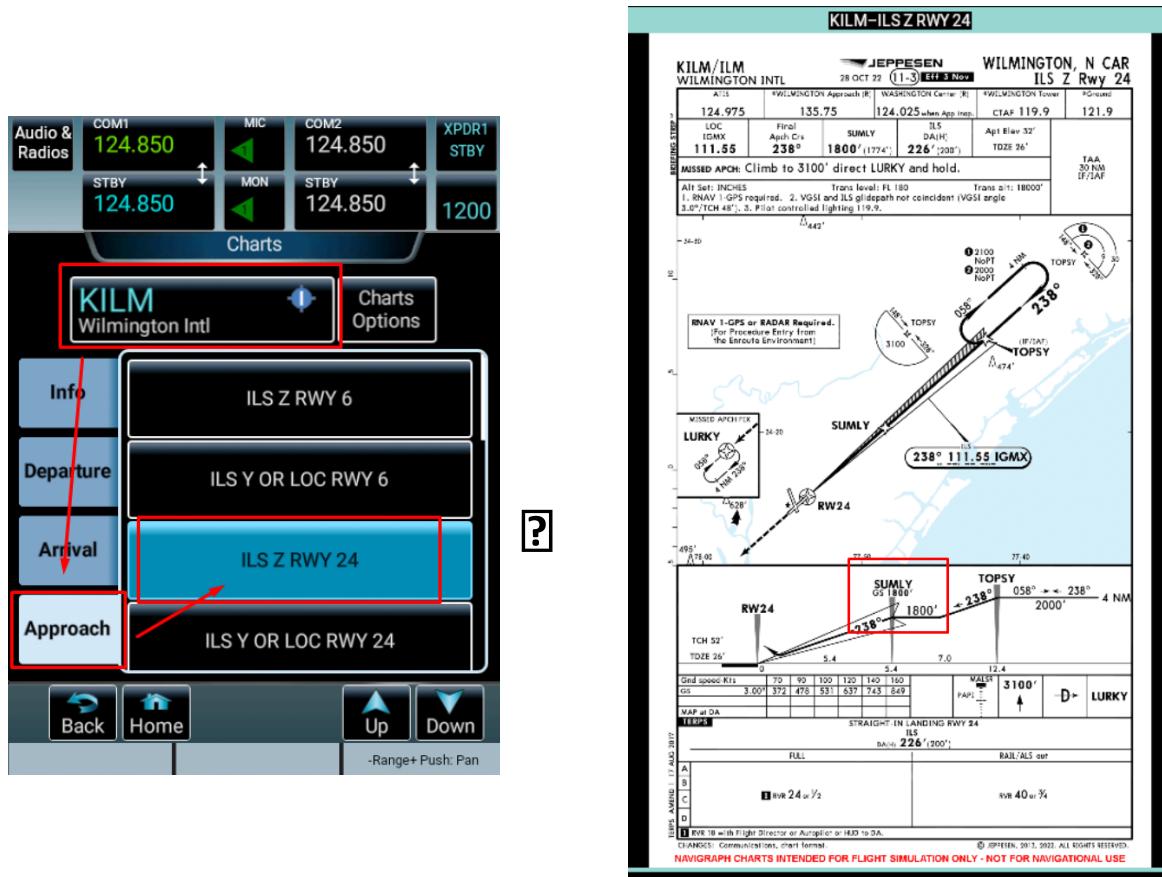


Now going back to the flight plan page we see the new waypoint **SUMLY** populated on the flight plan.



Let us have a look at the approach chart for ILS 24 to get the altitude restrictions at this waypoint. To do that

GTC1 Home Charts Proc Approach tab ILS Z RWY 24

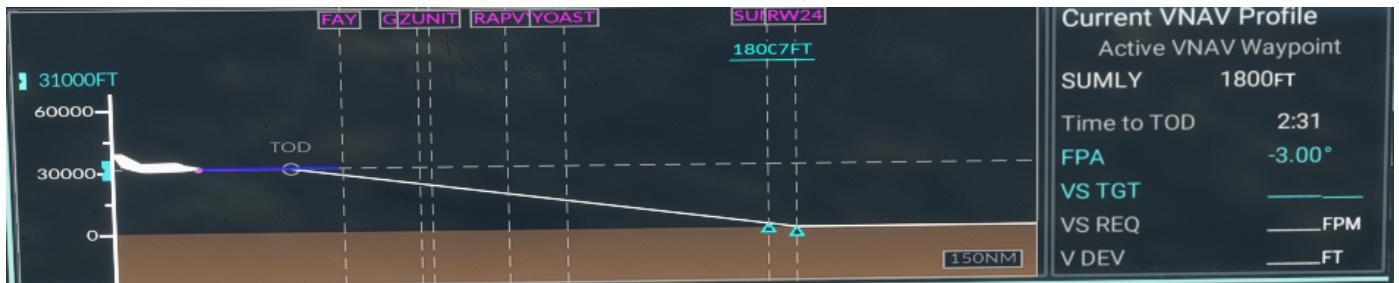


As per the chart, **SUMLY** altitude restriction is 1800'.

To set the altitude restriction press the **\_\_\_\_\_FT** button besides each point in the flight plan page and enter the needed altitude. NOTE: on V1.0.4 onwards, chart altitude constraints for approaches and STARS are automatically loaded in the GTC so we will only need to verify that they are correct....



You will now see a VNAV profile created on the VSD, with a TOD (top of descent point) that is 2.5 minutes away.



The TOD is calculated based on a -3 degree flight path angle from current altitude/or last waypoint altitude, you might see multiple level offs and multiple TOD points throughout a path with many constraints.

Before reaching TOD, let us set in the landing speeds.. to do that :

GTC2 → Home → PERF → Speed Bugs → Landing Tab → enter landing speeds or press “Get from sim” to have them automatically calculated



Press “All On” to show the Vapp and Vref on the PFD

When the TOD point is around 1 minute away a vertical deviation indicator will be shown beside the altimeter on the PFD. At this point we reset our selected altitude to 1800' the first altitude restriction at **SUMLY**.

Press the VNV button on the autopilot panel to arm VNAV, a Yellow bulb illuminates under the VNV button and you will see a white VNV shown on the autopilot FMA confirming that it is armed.



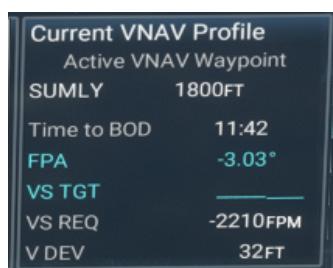
Once TOD is reached, the alt mode will turn to a green **VNV** and the autopilot will commence descent.

The control logic will try to maintain the glide path shown on the VSD.

Retard the throttles to around 55~60% N1 during descent for fastest speed. As you can see below, the aircraft is descending at the required FPA to maintain the magenta vertical line on the VSD and minimize the vertical deviation.

Monitor speed during descent as the HJET does not have autothrottle so you need to adjust the throttles accordingly.

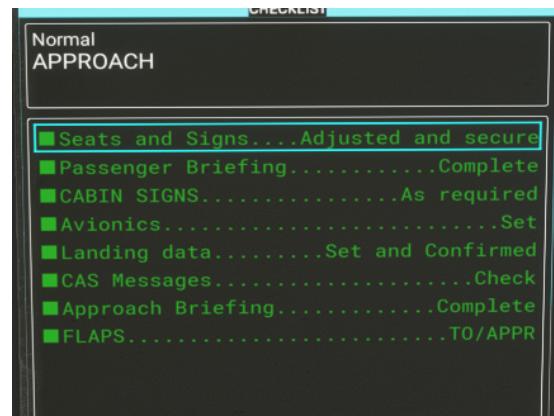
Time to the bottom of descent (BOD) is around 12 minutes.



We are now almost at **SUMLY** our initial approach fix (IAF) we should start seeing a glide path preview “white” diamond from the ILS approach, we are continuing on the vnav path until **SUMLY** then we are ready to intercept the glide path.



Complete the approach checklist:



- Flaps set to TO/APR Position
- Reduce throttle to intercept the IAF at 180 KIAS

You should now see both VNAV and “White” G/S diamond converging together as we are getting closer to **SUMLY**



## FINAL APPROACH

Once at **SUMLY** We change the NAV mode to LOC by pressing the “Active Nav” soft key below the PFD. Then press the **APR** button on the GFC to initiate the ILS approach.



A green **GS** is shown on the Autopilot vertical mode annunciator when glide slope is captured , and horizontal nav mode should now be **LOC**

- Once glide slope is captured extend landing gear,
- Once speed is below 160 deploy flaps to LND position
- Adjust the throttle to maintain 112 kts (Vapp in this configuration)
- Complete the before landing checklist



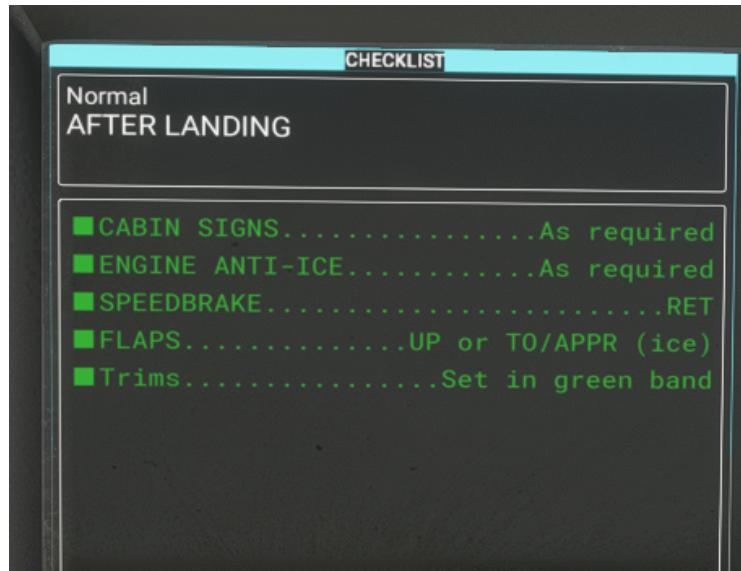
- At 230 ft MSL (200 ft AGL) ILS Minimums are reached and the autopilot is required to be disconnected. Press the Red Button on the Yoke Left hand side. Auto Throttle on E2 Mode must also be disconnected at this Altitude.
- At 80 ft MSL (50ft AGL) smoothly reduce thrust to IDLE and touchdown with minimal flare.
- Gently lower the nose to the runway and smoothly apply maximum braking.
- Deploy the speedbrake and maintain braking until the aircraft has slowed to 40 KTS.

## TAXI TO THE RAMP

As we are exiting the runway

Cross The Hold Short Line

- Cabin Signs
- Engine Anti-Ice
- Speedbrake/Spoilers
- Flaps
- Trims

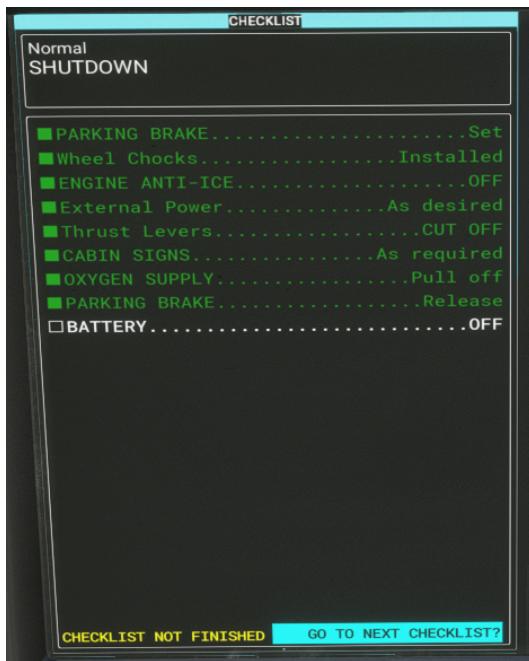


Contact Ground on 121.900 to request Taxi to parking

Follow the Charts and instructions to the parking ramp and prepare for shutdown.

## SHUTDOWN

We are ready to conclude the flight, and complete the shutdown checklist.

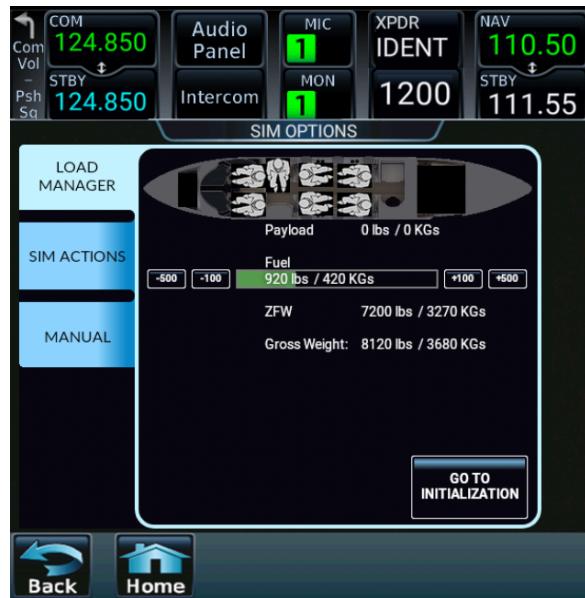


**NOTE:** Parking Brake Released Ground Power will be unavailable. If this is a "Turn" you would keep the Parking Brake Set so that Ground Power will be available during the next steps. Even with v1.0.4 the parking brake will disconnect the GPU..

But before the final step of turning off the battery we need to open the doors to let our passengers out. Remember that how you leave the plane including PAX / Cargo and all switches will be persisted to your next flight! Go to:

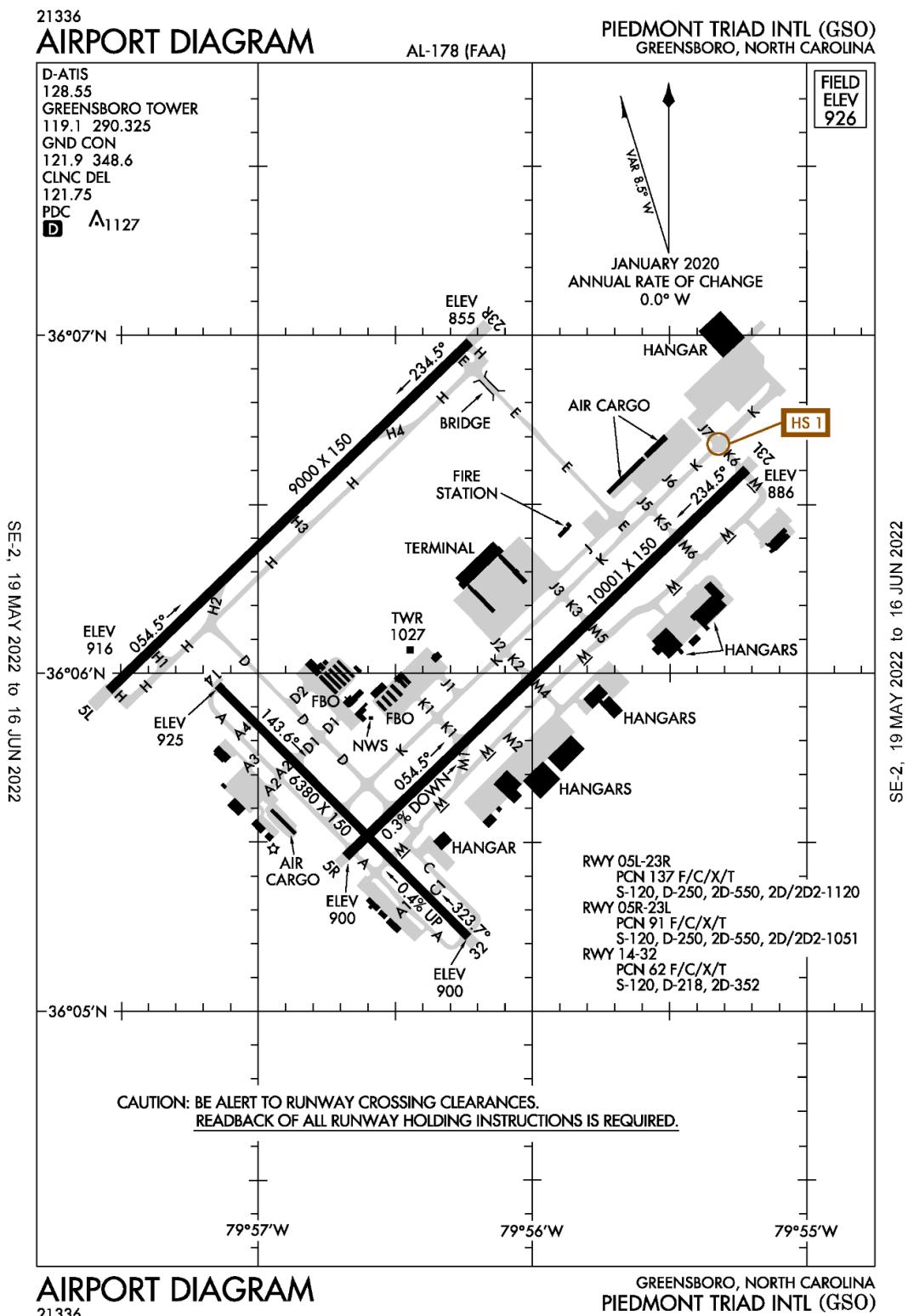
GTC2>HOME>SIM OPTIONS>Sim Actions Tab

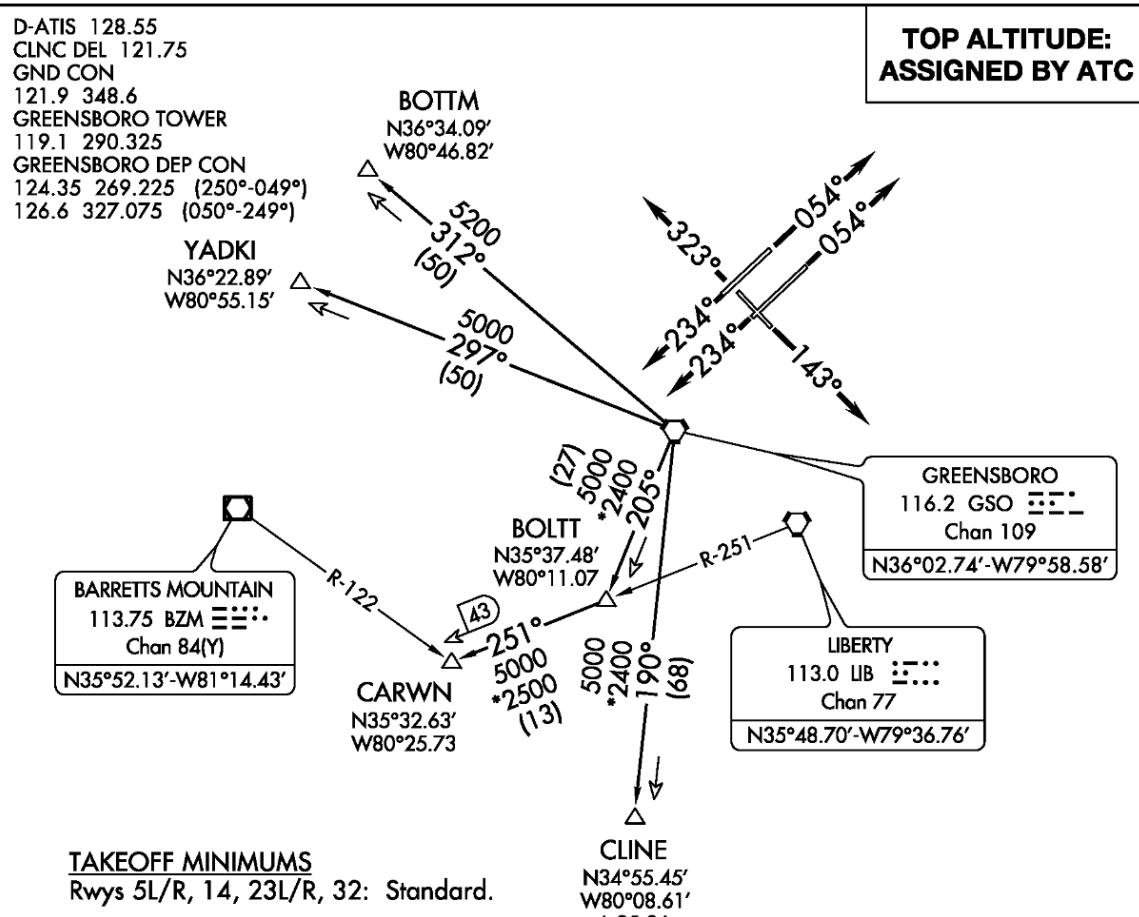
And choose the options you like.



## APPENDIX: CHARTS

Here we include the Current FAA Charts. These look different than the Navigraph Charts which are based on Jeppesen Format. However they are “freely” available on the web. Thanks Fltplan.com!





SE-2, 19 MAY 2022 to 16 JUN 2022

SE-2, 19 MAY 2022 to 16 JUN 2022

NOTE: Chart not to scale.



#### DEPARTURE ROUTE DESCRIPTION

**TAKEOFF RWYS 5L/R:** Climb heading 054°, thence. . . .

**TAKEOFF RWY 14:** Climb heading 143°, thence. . . .

**TAKEOFF RWYS 23L/R:** Climb heading 234°, thence. . . .

**TAKEOFF RWY 32:** Climb heading 323°, thence. . . .

....maintain altitude assigned by ATC. Expect vector to intercept assigned radial associated with the issued transition. Proceed via the depicted radial to the transition fix, thence as filed. If no transition assigned, expect vector to the appropriate fix. Expect requested altitude/flight level ten (10) minutes after departure.

**BOTTM TRANSITION (TRI9.BOTTM):** Expect vector to intercept GSO R-312 to BOTTM.

**CARWN TRANSITION (TRI9.CARWN):** Expect vector to intercept GSO R-205 to BOLTT, then on LIB R-251 to CARWN.

**CLINE TRANSITION (TRI9.CLINE):** Expect vector to intercept GSO R-190 to CLINE.

**YADKI TRANSITION (TRI9.YADKI):** Expect vector to intercept GSO R-297 to YADKI.

WILMINGTON, NORTH CAROLINA

AL-459 (FAA)

22027

LOC I-GMX	APP CRS	Rwy Idg	8016
111.55	238°	TDZE	26

Apt Elev

32

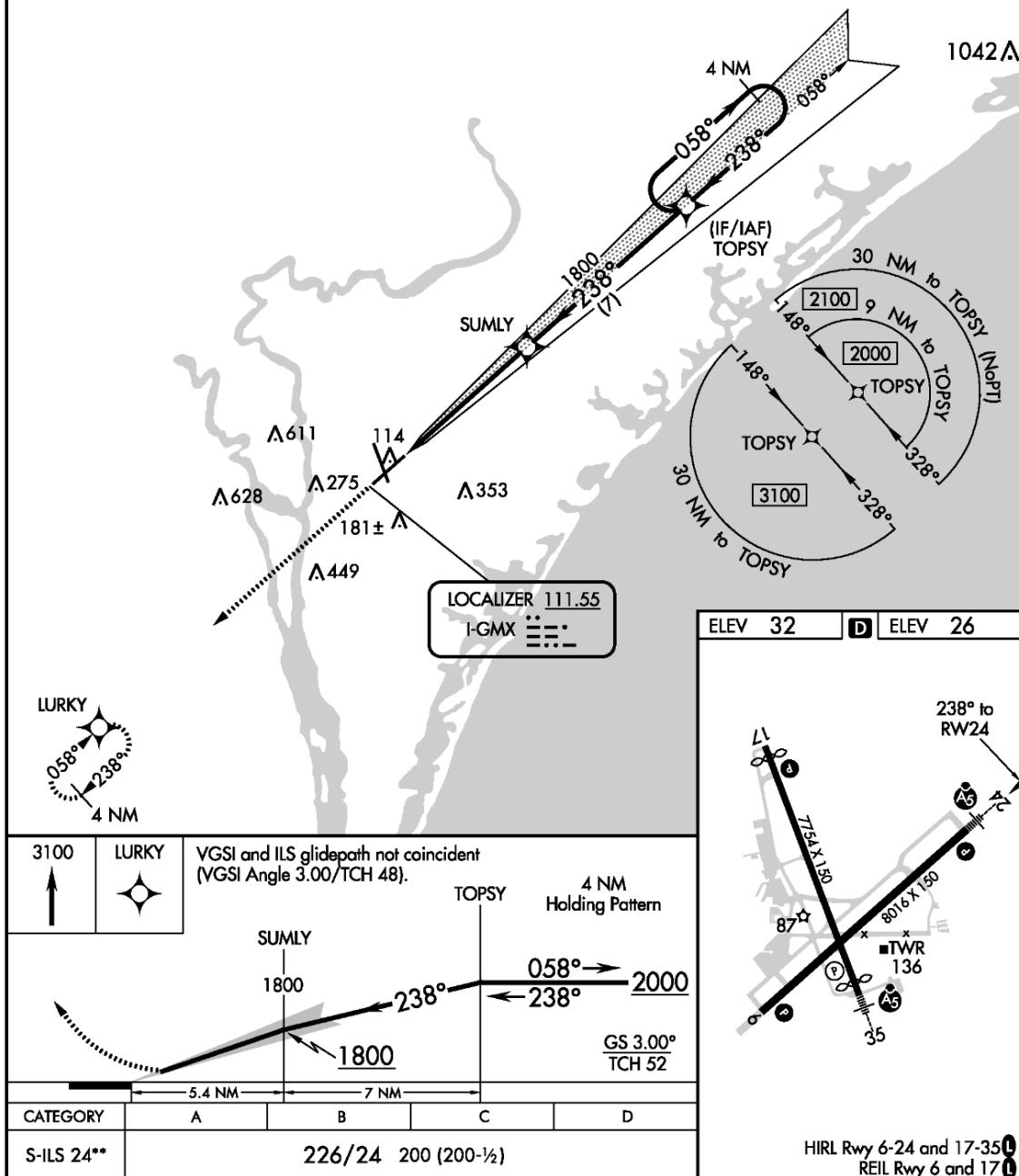
ILS Z RWY 24  
WILMINGTON INTL (ILM)

ASR	RNAV 1-GPS required. **RVR 1800 authorized with use of FD or AP or HUD to DA.	MALSR A5	MISSIED APPROACH: Climb to 3100 direct LURKY and hold.
ATIS 124.975	WILMINGTON APP CON ★ 118.25 284.65 (164°-343°) 135.75 317.425 (344°-163°)	WILMINGTON TOWER★ 119.9 (CTAF) 0 239.3	GND CON 121.9 348.6

RNAV 1-GPS or RADAR REQUIRED

SE-2, 19 MAY 2022 to 16 JUN 2022

SE-2, 19 MAY 2022 to 16 JUN 2022



WILMINGTON, NORTH CAROLINA

Amtd 1 17AUG17

34°16'N-77°54'W

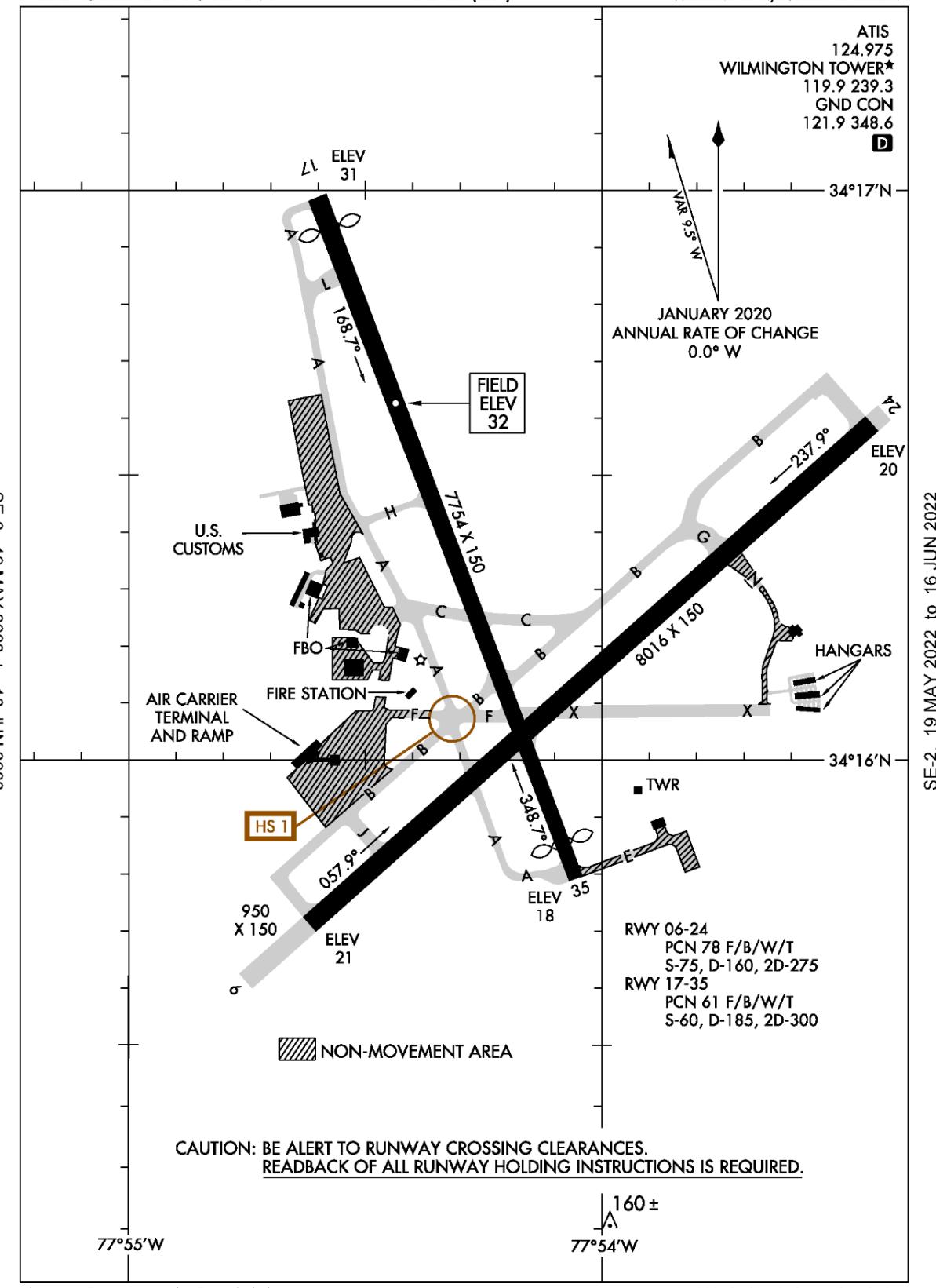
WILMINGTON INTL (ILM)

ILS Z RWY 24

21336  
AIRPORT DIAGRAM

AL-459 (FAA)

WILMINGTON INTL (ILM)  
WILMINGTON, NORTH CAROLINA



21336  
AIRPORT DIAGRAM