User Guide



CHAPTER 1



"Forward thinking FBOs need technologies to improve their business. Stax helps make hangar shuffles less time consuming and allows FBOs to make the most of the space they have."

Bill Borgsmiller - President/CEO, ACI Jet

EFFICIENT

StaxTM was built to allow FBOs and MROs to efficiently plan their daily aircraft stacks and to manage their tenant and charter fleet as well as any transient aircraft.

EASY TO USE

With easy-to-use hangar, ramp, and obstacle creation utilities, it quickly and accurately represents your facilities without learning complicated drawing programs.

CUSTOMIZABLE

Stax[™] offers a full complement of customizable settings which allow you to set aircraft status categories, hangar and ramp guides, safety perimeter and collision avoidance guidelines to your specific needs.

FLEXIBLE

Whether you use an iPad tablet or Mac and Windows computers, $Stax^{TM}$ can go where the need is greatest – in the office or in the field. Live access is shared by personnel in the hangars and on the ramps as well as management and customer service personnel.

With the StaxTM HUDs, detailed service notes on aircraft, crew, and customer needs and requirements are put in the hands of line personnel, improving the efficiency and accuracy of services.

The Big Picture

WHAT YOU WILL LEARN

- 1. What each tab offers
- 2. Moving aircraft and obstacles
- 3. Removing aircraft and obstacles
- 4. Reading reports
- 5. Customizing StaxTM

This is where you will probably spend a majority of your

time. Here you will find a listing of your hangars and ramps along the left side of the screen. To select a facility to work with, simply click the facility's name to select it. Once selected, you will see a scaled graphical representation of the facility and its contents.

Selecting items in a facility is done by clicking the item. Selected aircraft and obstacles turn light blue and display their tail or ID number at the bottom of the screen to indicate they've been selected. A locked obstacle won't change color. It will stay black to show it's locked but it's name will appear at the bottom of the screen where an aircraft would have displayed its tail number. Once selected, you can display the detail HUDs or move and rotate an item. Aircraft can be transferred to another facility and their color coded status can be changed.

BUBBU

Facilities

Fleet is a term that can mean different things to different people. Here we use it to describe a group of aircraft you deal with over and over. It might include aircraft you own, long-term base tenants, frequent guests, VIPs, or any combination or these. Use Fleet to save information about aircraft, such as owner and tail number so you don't have to keep re-entering it.

This tab presents our catalog of aircraft available in the program. Selecting a make and model presents you with a scaled drawing of your chosen aircraft. It also provides you with length, width, height, and area. Fields are available for you to add owner, tail number, purpose, scheduling, notes for the line crew, and pricing information. Quickly find a particular type using the search field at the top of the list.

Obstacles are anything found in the hangar or on the ramp that can't fly. Mainly ground support or recreational vehicles and architectural anomalies (poles, stairs, offices, and such). Obstacles can be manipulated just like aircraft within the hangar. On ramps you may have run ups, backstops, taxi lines, or tiedown areas. Once an obstacle has been precisely measured and placed you can lock into position so that it cannot accidentally be moved.

STINDINGO

Creating, editing, and copying hangars and ramps couldn't be easier. Specifying dimensions and door locations is all StaxTM needs to produce an accurate to-scale representation of your facilities.

REPORTS

The reports module gives you several options for viewing your inventory and facilities. Review your inventory by location, tail number or status. Compare your facilities by space or revenue efficiencies. Reports can be scheduled and output to a PDF or CSV file for analysis and sharing.

Help files for each of the tabbed sections are available here as well as topics like FAQ and tips and tricks. Use this section to help bring new employees up to speed or as a refresher for existing employees.

All the options and customizable settings are found here. Specify your status categories, collision parameters, grid sizes, etc. Your passwords can also be set here.

Where To Go From Here

OTHER RESOURCES

- 1. StaxTM YouTube channel
- 2. StaxTM User Guide Reference
- 3. StaxTM Customer Support

The StaxTM YouTube Channel is located at:

https://www.youtube.com/channel/UCRuC56vAsA Xyr4y-pdJfMPg

Yes, it's a gnarly thing to type but you can just click it and be taken automatically to the $Stax^{TM}$ channel.

The StaxTM User Reference will be produced as a separate document and will contain all updates for new features add to StaxTM.

StaxTM **Customer Support** is available by email:

support@staxplanes.com

or by phone:

805-712-2804

Email support responses are generally provided within one business day. Phone support is available from 8 a.m. to 6 p.m. Pacific time.



StaxTM is very intuitive and easy to use.

For those of you anxious to get started, we'll run through a quick get up and running roadmap.

We will cover:

- Creating your first hangar.
- Adding your first aircraft
- Working inside the hangar
- Creating your first obstacle
- Moving obstacles
- Reading reports
- HUDs
- Customizing your experience

Creating your first hangar.

CREATING A HANGAR

- 1. Decide on the hangar shape.
- 2. Name your hangar.
- 3. Input the hangar dimensions.
- 4. Specify size and location of doors.
- 5. Preview your creation.
- 6. Save the hangar.

In the Utilities tab, when you click 'Create New', you will be presented with four different hangar types – Rectangle, Thangar, Dog leg left and Dog leg right. With these basic types you should be able to quickly construct any of your hangars or ramps. Additional shaping can be accomplished with obstacles.

After clicking the 'Create New' button and selecting a hangar shape, you will need to enter the detail information for the hangar or ramp, starting with name. There are two fields to enter complex names but only the first one is required. Now enter the dimensions of your walls in feet as decimal numbers like 102.5 not 102 1/2.

For hangars, next come the doors and safety zones. Doors are specified by entering their width and the distance from the corner to the right of the door, and height. Safety zone widths are specified for each wall individually.

Optionally, you can enter a standard rate charged for this facility.

Preview your hangar or ramp. A miniature drawing will be shown so that you can verify that you have entered the information correctly. If all looks right, Save the hangar and you are done. If the preview shows that you have made a mistake,

tap the Clear button and make any corrections needed then Preview again.

Once you are satisfied, 'Save' your hangar and then let's go pick some aircraft to put in it. And if you are really adventurous, we can also create some obstacles.

Add your first aircraft.

ADDING AN AIRCRAFT

- 1. Choose the manufacturer.
- 2. Choose the model.
- 3. Specify the aircraft details.
- 4. Place the aircraft in a hangar.
- 5. Optionally, add the aircraft to your fleet.

Start by clicking the AIRCRAFT tab. Adding an aircraft could not be simpler. Click on a manufacturer's name in the list on the left and you will see an expanded list of the available models for that particular manufacturer. Even though our catalog is quite extensive, there may be a situation where you need an aircraft that we have not set up yet. Give customer support a call and we can usually get the aircraft added in 3-4 days.

Once you have selected an aircraft you will enter the details for this particular aircraft. There is a lot of information you can enter but the only required information is a unique tail number. Tail numbers are what $Stax^{TM}$ uses to identify each aircraft.

Don't worry if you don't have all the information available right away. You will have plenty of opportunities to add it later if need be. Notice that the dimensions and total area occupied by the aircraft are provided for you based on the box model of wingspan times length. This can be very handy if you need to provide a quote quickly and need to know how much space an aircraft takes up.

Once you have entered your information, you can choose which hangar to put the aircraft in. You can also optionally decide to add the aircraft to your FLEET.

After you have created a few aircraft and placed them, go to the next section and see how you can manipulate the aircraft in the hangar or on the ramp.

Inside the Hangar.

MANIPULATING YOUR STACK

- 1. Selecting an aircraft.
- 2. Moving an aircraft.
- 3. Rotating an aircraft.
- 4. Layering aircraft.
- 5. Moving an aircraft to another hangar.
- 6. Removing an aircraft.
- 7. Examining an aircraft.

Selecting an aircraft is step one for anything you want to do with an aircraft. Selecting an aircraft will turn it a light shade of blue and its tail number will appear at the bottom of the screen. How you select an aircraft depends on the type of system you are using. For Mac and Windows it is a single click. For iPad it is a double tap.

Moving and rotation also depends on your system type.

On a computer, you move the selected aircraft by dragging it with your mouse or dragging your finger on the trackpad. Rotation is done by holding down the left shift key and dragging your mouse or finger.

On an iPad, you move the selected aircraft by dragging with your finger and rotate it by putting two fingertips on the screen and twisting them. The drag has to be done with a finger on the aircraft itself. Rotation of the selected aircraft can be done by placing your fingers anywhere in the hangar. This means you do not have to block your view of the aircraft when rotating.

StaxTM does not present a true 3D picture of the stack but you can indicate that a particular wing fits under another aircraft's tail for example. The \bigcirc \bigcirc \bigcirc \bigcirc icons at the top right of the hangar will let you move a selected aircraft up and down in relation to the other aircraft in the hangar.

To move an aircraft to another hangar, start by selecting it, then click the Move button. A list of hangars and ramps will pop up and when you choose one by clicking it, the selected aircraft will move to the center of the hangar or ramp you picked.

Removing an aircraft from the hangar is done by selecting it and then hitting the Remove button in the lower left corner.

You will have the option of removing the selected aircraft or removing everything to start over with an empty hangar.

Keep in mind, that if this aircraft is not part of your FLEET, any information you entered for this aircraft will be lost.

Create an obstacle.

CREATING AN OBSTACLE

- 1. Choose an obstacle type.
- 2. Specify the dimensions.
- 3. Preview your obstacle.
- 4. Save the obstacle.
- 5. Optionally, place the obstacle.

We all know there are many things in a hangar other than aircraft. It may be an owner's vehicle, tool cribs, line office, a movable set of stairs, or some architectural feature. Whatever it is, if it can't fly, StaxTM calls it an OBSTACLE.

Obstacle creation is done inside the OBSTACLES tab. After opening the Obstacle Tab, you will initially see a list of obstacles you have already created. Selecting an obstacle from this list will show you all the details for this obstacle and give you the options to Delete, Copy, or Remove.

If you click the 'New' sub-tab, you can choose generic shapes like rectangles, triangles and ovals or specific types of vehicles. Once you have chosen an obstacle shape you will be asked to provide the dimensions, as well as owner, id, and a name. The id must be unique as $Stax^{TM}$ uses it as a sort of tail number to uniquely identify obstacles.

After entering the obstacle details, you SAVE the obstacle, you will have the additional option to Place it in a hangar or on a ramp.

Moving obstacles.

MANIPULATING YOUR OBSTACLES

- 1. Selecting an obstacle.
- 2. Moving an obstacle.
- 3. Rotating an obstacle.
- 4. Examining an obstacle.
- 5. Locking an obstacle.
- 6. Removing an obstacle.

Selecting an Obstacle is done just like selecting an aircraft. There is a slight difference in what happens next. As you will see in just a bit, obstacles can be locked in place so they aren't accidentally moved. When selected, an obstacle's id will be displayed at the bottom of the screen and, if it is not locked, it will turn the same light blue color as a selected aircraft. Locked obstacles are tinted black whether they are selected or not.

A selected obstacle, assuming it is not locked, can be moved and rotated just like an aircraft.

You can also examine an obstacle just like an aircraft. Right click and the HUD pops up. The information displayed in the HUD is similar to that shown in the aircraft HUD. The FLEET switch on the aircraft HUD is replaced with a LOCKED switch for obstacles.

Removing or moving an obstacle is done exactly the same as an aircraft.

Reports

REPORTS

- 1. Inventory Reports
 - 1. by Facility
 - 2. by Tail Number
- 2. Ranking Reports
 - 1. by Efficiency
 - 2. by Revenue
- 3. Sharing Reports

Keeping track of the business is important. And Stax[™] gives you the tools to stay on top of what's going on.

Inventory reports can be used by customer service as well as the line staff. Anybody that needs to know 'what is where'. The INVENTORY BY FACILITY report shows you what tail numbers can be found in each hangar including the aircraft type, owner and rate they are being charged. The INVENTORY BY TAIL NUMBER is great for locating a particular aircraft including the type, owner, and hangar or ramp.

Ranking reports are a good way to look at how well your stacking is, well... stacking up. Ranking by efficiency shows you how well the total square footage available is being utilized while the ranking by revenue shows you which hangar is producing closest to its potential revenue projections.

Sharing reports is done by turning them into PDF or CSV documents that can then be emailed as an attachment or included in a text message. You also have the option of printing them with a compatible printer.

HUDs

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- 1. Showing the HUD
 - Hangar
 - Aircraft
- 2. Hiding the HUD
 - Hangar
 - Aircraft
- 3. Editing the HUD
 - Hangar
 - Aircraft

HUDs or Heads Up Displays provide you a window into the details of your hangars, ramps, and aircraft.

Displaying a HUD for an aircraft in a hangar or on a ramp is accomplished by right-clicking the aircraft. To display the HUD for a hangar or ramp, you can click the '%' sign in the toolbar at the top.

Hiding a HUD when you are finished with it is just as easy. Right-clicking the aircraft or obstacle HUD will dismiss it. The hangar and ramp HUDs can be dismissed by tapping the '%' in the toolbar again.

The lock icon turns the financial fields on or off and requires a password to turn them on. The Fleet switch on the aircraft HUD lets you move an aircraft in and out of your fleet. The LOCKED switch on obstacle HUDs lets you lock and unlock an obstacle in place.

Customizing StaxTM

CUSTOMIZING STAXTM

- 1. Choose your status descriptions.
- 2. Specifying efficiency levels.
- 3. Choosing your snapshot background color.
- 4. Specify the hangar and ramp gridlines.
- 5. Adjusting the sound level.

One of the best features of StaxTM is how customizable it is.

In the FACILITIES view, the status legend toggles on and off with the '?' button in the hangar toolbar. In the OPTIONS tab you can change the text on the status buttons by clicking the button and typing new text.

For those of you who print a lot of hangar snapshots, we gave you the option to wash out the background to reduce the amount of ink needed.

Setting gridline distances, safety corridor widths, and collision parameters are set by clicking the appropriate box and entering the numbers.

Switching from imperial to metric is done automatically based on your device's location but, you can force a change in scale by selecting your choice on the switch.

For those of you in noisy environments, you can adjust the button click feedback up or down.