

# TahICAM Quick Start Guide

Release 03/03/03

## **Table of Contents**

Table of Contents.....	1
What TahICAM Does.....	1
Installing TahICAM.....	2
Sample Programs.....	2
Starting TahICAM.....	2
Datum.....	2
Post File Generator.....	2
Please Note: .....	2
Part Tool Clearance.....	3
Path Approach Offsets.....	3
Defined Tools Dialog.....	3
Locating Tool and Part Change Positions.....	3
The Datum and the Clipboard.....	3
Using Pathfinder and the Finder_tmp Layer.....	4
When Pathfinder does not complete.....	4
Using Offset Line Types.....	4
Adding a Lead-In and a Lead-out.....	5
Creating a Named Path.....	5
Sinking a Polyline.....	5
Editing Sinks.....	6
Creating a Roughing Spiral .....	6
Creating a Circular Pocket with the Roughing Spiral.....	6
Using Offsetmaster, Polyoffset, Polyconnect, and Altconnect.....	7
Path Fillets.....	7
Polyfillet .....	7
AdjPolyfillet.....	7
Creating a Drill Path.....	7
Creating a Canned Cycle.....	8
Using the Layer Toggles.....	8
Writing Your Program on the Clipboard.....	8
Reviewing and Posting Your Program.....	10
Customizing the Post.....	11
Tech Support.....	11

## **What TahICAM Does**

TahICAM is a complete 2½ D working environment that works inside AutoCAD to create ISO G-code programs that require no further editing. Traditional AutoCAD entities and dictionary groups provide the basis for TahICAM's output. TahICAM leverages your existing AutoCAD skills by using your ability to create and modify geometry in the best CAD drawing package on the market today. TahICAM can work right on top of ACIS 3-D solids and use geometry extracted from its faces. The polylines that TahICAM creates are organized into standard AutoCAD groups and given structured path names.

Creating CNC programs using native AutoCAD commands is one of the strengths of TahICAM. One needs only a basic familiarity with AutoCAD to effectively use TahICAM's programming capabilities. TahICAM provides additional specialized commands that make working with drawing geometry even easier.

# TahICAM Quick Start Guide

Release 03/03/03

TahICAM uses modifiers before and after the path name to provide total control of tool behavior. Paths can be offset left or right and display the cutters machining along the side a path. TahICAM uses Smart Approach to insure that the cutter is always correctly setup for the path. Straightforward statements entered on a numbered Clipboard with 10 edit lines determine the program flow. There is no practical limit on the length of the program you construct. Most programs can be written on just one Clipboard.

TahICAM keeps your drawing area clear and provides extensive visualization tools so you can see exactly where the cutter will go when you run your post on the machine. TahICAM provides a post editor that will make it possible for you to easily configure a post for most machine controls. These post definitions currently support any control that is similar to Heidenhain, Haas, or Fanuc.


## ***Installing TahICAM***

Please refer to the readme.txt file in the TahICAM directory for installation issues.

## ***Sample Programs***

A drawing called "Ring.dwg" can be found in the TahICAM directory in the Sample Parts folder. This drawing contains an ACIS solid that was exported from ProE to form the basis for a CNC program. Open this drawing and start TahICAM to see the capabilities.

## ***Starting TahICAM***

To start TahICAM, click on the **Start TahICAM** Button  at the bottom of the tool bar. By default, TahICAM places your post file in the current drawing directory. Saving your drawing to the directory of your choice insures that that your post will be kept with your drawing. TahICAM will request that you do so before continuing.

The TahICAM startup dialogs are used to gather some information about your program and set some of the parameters that will govern the way the program works.

## ***Datum***

You will get a prompt on the command line to Place Datum on top surface of the part. Use the pick box to select the location for your datum. Endpoint and center snaps are active during the selection. The datum will maintain UCS zero coordinates for your CNC program. This will be where part zero will be defined at the machine. The datum can be moved at any time by the usual AutoCAD commands. That will force the UCS to follow before running or posting the program.

## ***Post File Generator***

Next, select the machine controller for your post. The TahICAM installation places the file Sample Haas.def in the TahICAM directory. Use this one for now. Later you will define the post definition for your machine using the post editor on the start key fly-out.

Please Note:

The TahICAM post currently handles three controller styles: Heidenhain, Fanuc, and Haas. If your controller is similar to one of these, there should be no problem in customizing one of these styles for your machine.

# TahICAM Quick Start Guide

Release 03/03/03

## **Part Tool Clearance**

After you select your desired controller, the cursor will skip to the Part Tool Clearance tile. The three input fields in this tile are used to set the clearances needed to clear clamps or other obstructions when your program is running.

Max +Z Limit is the distance that the spindle can be raised above the program Z-0 without hitting a travel limit stop. The default for this setting is extracted from the current controller definition file when a new cnc session is started. Jump +Z is the distance above program Z-0 that the tool will retract to during a jump. Hop +Z works like Jump +Z. It lets you set a closer distance to the part if there are no obstructions between paths.

## **Path Approach Offsets**

The Smart Approach feature of TahICAM uses path approach offsets.



- Top Clearance is where the rapid Z movement ends and the Z feed movement begins for the feed plunge option. With the rapid plunge option, this distance is ignored.
- Side Clearance is the distance between the side of the cutter and the centerline of an offset path. From this location, the cutter will feed over to the path beginning.
- Cyc Rtn Hgt sets the tool's return height above the feature for canned cycle paths such as drilling or tapping.

## **Defined Tools Dialog**


The Defined Tools dialog appears next and allows you to input or edit the information for all of the tools you anticipate using in your program. The tool dialog installs a .500 End Mill by default. At least one tool must always be present in the program and the Defined Tools dialogue.

## **Locating Tool and Part Change Positions**

Switch to an isometric view. You'll clearly see a representation of your cutter (in red) sitting on the Park position (in green). Park, is the part change position. In blue, you will see a round object with a number inside. This is the tool change position.

To relocate the park or tool change positions, click the **Change Location** Button  on the **Pathfinder**  fly-out toolbar. Then, click on the first one that you want to move. You can either input coordinates, or, pick a filtered coordinate position with your mouse pointer. We recommend keeping the park and the tool change positions slightly separated to maintain clarity while you are programming. All TahICAM objects can be moved by standard AutoCAD commands. The default location of these positions can be changed in program options.

## **The Datum and the Clipboard**

The Datum shows where your program XYZ Zero point is. The **Current Clipboard** Button  is where you call up the program clipboard to input your path and cycle



# TahICAM Quick Start Guide


Release 03/03/03

names and other information when you write the program. It will not contain G-codes unless you include them as manual programming (see Section III of the tutorial on the use of literal commands). Using the information you put in the Clipboard, TahICAM will generate the G-codes for the program. More clipboards may be added if needed.

You may find it helpful to read the section on “Writing Your Program on the Clipboard” before continuing, especially if you would like to add the tool paths to the clipboard as you go along.


## ***Using Pathfinder and the Finder\_tmp Layer***

The **Pathfinder** Button  is the command you use to create toolpath polylines from drawing geometry and give them a travel direction. Pathfinder works by converting lines, circles, and arcs to polylines. Click on the **Pathfinder** Button . Use the pick box to select an endpoint, midpoint, or circle quadrant for your path starting point.

If you wish to retain your original geometry, set Pathfinder to use the FINDER\_TMP layer by entering a T and then an Y before choosing the start point. Now TahICAM will create a polyline copy of the geometry on the FINDER\_TMP layer instead converting the original geometry to a polyline. To view and use the newly created geometry, click on the **Finder\_tmp Isolate** button .


If a closed path is chosen, Pathfinder will display a green arrow at the selected node. Align the arrow in the desired path travel direction and left click. You'll see a series of arrowheads appear showing the travel direction with a green node at each vertex. At a node where more than two lines intersect, you will get another search arrow with which to indicate the next direction.

## ***When Pathfinder does not complete***

If the arrowheads and grips stop only part of the way around to the end of the loop, it means that there is either a break in the lines at the last node, or there are polylines mixed with the regular lines. You must either close the break or explode the polylines to fix the problem. Then you can re-run Pathfinder to establish your path. Pathfinder automatically explodes polylines that are picked but not ones found in a loop. Click on the **Run Selection** Button , and then click on the newly created path to see a graphic representation of the current cutter travelling along this path.

## ***Using Offset Line Types***



TahICAM automatically loads both a left and a right offset line type in your drawing when you start the program. To change the offset of a path, you use the AutoCAD change properties command, or, if activated, the pick first option and click on the desired path or paths. Pull down the line type list and choose the desired offset line type then press escape twice.


You can check how the path will run by clicking the **Run Selection** Button  and selecting the path to get a graphic representation of the tool travel. Centerline paths do not allow you to compensate for tool diameter variations. Offset paths call a G41 or G42 in the post to cause the cutter to cut the edge of the path.

# TahICAM Quick Start Guide


Release 03/03/03

## ***Adding a Lead-In and a Lead-out***


On the **Pathfinder** fly-out of the toolbar , click on the **Lead-in** Button . The command line will prompt you to select the objects (polylines) you wish to create leads for. In the Add Lead to Path dialogue, choose whether to add a lead-in, a lead-out, a path extension, or any combination of the three options. The extension provides a small over lap for machining past the start point of a closed loop. Normally all three are desired.

Changing almost any of the other parameters will have a direct affect on most of the rest of the parameters. Be sure to check that the right tool is chosen because the lead is created based on the diameter of the currently chosen tool. You can also add a lead to a lead by using the same command on a path with a lead already established. Adding a lead also will change the line type automatically. When you are satisfied with your leads, use **Run Selection**  to see how the cutter will follow the revised path. Use the AutoCAD undo command if it is not satisfactory. Then you can redo the lead with different parameters.


## ***Creating a Named Path***

The **Create Group** Button  launches the command that makes your Polylines into addressable path groups. These are genuine AutoCAD groups that respond to the commands that you are already familiar with. Program geometry can be moved or stretched and the results can be run on the screen immediately. The current release of TahICAM catalogs all of the program objects when start is run. It is necessary to run start if you delete or explode path groups.

When groups are created the path name and layer are published at the command line. These paths are listed in the Command Assistant on the Clipboard where you can add them to your program.

The **Edit Group** Button  launches the AutoCAD Object Grouping dialog. This is the same dialog that has been around since R13. A more useful group-editing tool is planned for a later release.

## ***Sinking a Polyline***



Sinking a polyline creates multiple copies of the original polyline at defined elevations. The original polyline is moved to the frozen layer Sink\_Const during the sink. Click on the **Sink Polys** Button , pick your path and press the enter key. The Sink Poly(s) dialog will appear. In the Sink Options section, check Group Path so TahICAM will create a named group for the result. The alternate direction checkbox is very useful for slots, allowing the cutter to mill back on the next level. The next tile, Multiple Paths, only applies if you have selected more than one polyline.

The Pick button is useful on a 3-D solid to determine the depth of the sink. Last Cut provides for the final clean up pass along the bottom of your cut. If you don't need a clean up pass, leave it blank. Total Depth is the depth taken from the top of the feature where your Polyline is located. Full Cuts is the number of cutter passes taken to reach the level of the Last Cut. Cut Depth is the relative depth of each full cut.


# TahICAM Quick Start Guide



Release 03/03/03

When you are satisfied with the depth of your full cuts, last cut, and total depth, click the OK button. On the command line, you'll see a message saying, "Created Group and Layer: Sink1". If you used FINDER\_TMP, don't forget to toggle the **Isolate**



**FINDER\_TMP** button  to make your original drawing geometry reappear. Toggling the **Hide Program** Button  will hide the new sink along with others already off.

## **Editing Sinks**

The **Edit Sink**  button launches the TahICAM Group Elevations dialog. This dialog will allow you to change the elevation of any or all of the polylines in a simple sink. The dialog also allows you to add additional elevations or remove some of the elevations, then equalize the spacing between the elevations. Edit Sink will give a message warning that it will not work with Sinks where two or more Polyines were sunk in parallel.

For complex sinks comprised of multiple polylines that were sunk as one, use the **Edit Group**  button to launch the AutoCAD Object Grouping dialog. To add cuts, duplicate the cut geometry at the appropriate levels and add them with the Object Grouping dialog. Be sure to use the same layer and line type as the sink. Remove extra cuts the same way. To relocate levels within a complex sink, turn off group selection from the pull down menu and use the TahICAM Relocate  command to change the levels of the cuts.

## **Creating a Roughing Spiral**

The **Rough Spiral** Button , on the **Sink Polys** fly-out toolbar , creates a centerline type spiral path to rough cut for a circular pocket. (Remember, centerline paths do not allow cutter diameter compensation.) The top tile in the Roughing Spiral dialog provides the diameter and center coordinates of the base circle. Directly beneath this information is a checkbox for Finish Allowance and a field for the amount of allowance.

The spiral will be created based on the tool shown at the top of the next tile. The Lookup button allows you to change tools. The Climb or Regular radio buttons select climb or conventional milling.

The Add Spring Pass checkbox causes the cutter to make one extra revolution around the final diameter. The Step Over Data combo box provides a list of available step-over ratios that terminate on the quadrant. The Preview button provides a graphic representation of the cutter movements.

OK creates the actual roughing spiral polyline. The resulting Polyline must be converted to a sink or a path before it can be called by a command in the clipboard.

## **Creating a Circular Pocket with the Roughing Spiral**


Use the sink command to create multiple spirals that are given a group name. This then is entered into the Clipboard as Skip-FP Sink## using the sink listed in the command assistant found by pressing the Cmds button. This will cause the cutter to make a rapid approach to above the first spiral, then feed down to the center of the spiral and feed along the spiral to the end then rapid across to center and feed down to the next spiral.


# TahICAM Quick Start Guide


Release 03/03/03


## **Using Offsetmaster, Polyoffset, Polyconnect, and Altconnect**

Use these commands to create roughing paths for pockets or bosses and paths to clean off the tops of parts.

Offsetmaster  creates multiple offsets of a polyline base on which direction and the distance that the cursor is moved. The % stepover can and finish allowance can also be adjusted until the desired result is displayed on the screen. The resulting Polylines can be connected automatically and have small fillets added as well. The left mouse button is used to create and the right mouse button cancels.

Polyoffset  generates a specified number of offset polylines in a specified direction (left or right) at a specified offset distance.

Polyconnect  will automatically connect a group of polylines from the end of the first polyline to the beginning of the next polyline.

Altconnect  will automatically connect a series of polylines from the end of the first polyline to the closest end of the next polyline. The direction of the polylines will be changed as required to make a continuous polyline.

## **Path Fillets**

The TahICAM pull down menu contains two commands that are often useful.


### **Polyfillet**

Will fillet every corner with a fillet of a specified size as long as its less than a certain size. It will also fillet between a large arc and a straight segment. This is something that native AutoCAD does not do.

### **AdjPolyfillet**

Will adjust all fillets in a certain range to a new size.

## **Creating a Drill Path**

TahICAM's drill path command will assist you in creating a Polyline at the correct elevation for a drill cycle. Click the **Drill Path** Button . On the command line you will see a banner showing the state of the selection options. The default settings will allow you pick a circle or block insert that represents a hole, after which TahICAM will search for and select others the same size. TahICAM then will create paths on multiple elevations with vertexes over the center of each hole.

This is a very powerful command that has many variations depending on the settings and how the circles are selected. See the TahICAM tutorial for more discussion on these settings and selection methods.


The Z-offset is from the elevation of the feature, not Z-0. TahICAM does not look for obstructions between holes on the same elevation, so you should make sure that the Z-offset is large enough to clear any obstructions between holes. If all these parameters are acceptable, hit Enter to continue. You will be prompted to Select objects:

# TahICAM Quick Start Guide


Release 03/03/03

Use the pick box to click on your circle(s) and, again, press Enter and the Drill Path Options dialog will appear. The Group tile contains the name of the path you are creating. The next tile, Start Object, contains information about the hole you picked first. The Selection tile gives information on how many holes were found. Choose one of the ten different path style options.

Click the Preview button to see the path on your drawing. Then hit Enter to go back to the dialogue. If the path you previewed does not look like the most efficient, choose and review another. Highlight the most satisfactory pattern and click OK to finish creating the path. Note that the command line tells you that the group and layer PATH# has been created.




You cannot create a drill path for a single hole. Instead, you must insert a FLAG at the center of the hole. Then you can run the peck drill cycle at the flag rather than on a path. To create a Flag, click the **Insert Flag** Button  and place it on the center of the hole to be drilled. A canned cycle can be run on several flags at once by using the group range command. Example: Peckdr01 Flag1-6.


## ***Creating a Canned Cycle***

Click the **Canned Cycles** Button , and then select type of cycle in the comb box. Please note that the thread milling option is not operational and is slated for removal. Click the New button to pull up the Define New Cycle dialogue. In the Cycle Name tile, you'll see the computer assigned name.

The **Return Plane** is the tool-retract height above the feature and should match the height of the drill path you created earlier. Total depth is the depth from the top of the feature, not Z-0. Enter the desired total depth, peck depth, and chip load. Dwell is typically used with reaming. Tap cycles require that the Thds/Inch input field be entered. (For metric threads, convert to threads per inch before entering the data.)

## ***Using the Layer Toggles***

A drawing can become extremely busy in a very short time with the additional geometry that TahICAM creates. Use the Hide-Pgm toggle and two layer control toggles to control what layers are visible. The **Hide Program** Button  will hide named paths you have created by turning off all layers with PATH and SINK names. Both layer control toggles   work identically and give you the opportunity to turn on and off groups of selected layers instantly.

Click on either of the buttons to get the Set Up Layer Toggle dialogue. Choose which layers you want that toggle to control by highlighting each one and clicking Add. To remove layers from the toggle control, press the **Setup Layer Toggle** Button  on the fly-out to launch the dialog again.

## ***Writing Your Program on the Clipboard***

TahICAM records your program on ten edit lines in each clipboard. There can be an unlimited number of clipboards. They are processed sequentially when the program is


# TahICAM Quick Start Guide

Release 03/03/03

run. Each line can be disabled to omit its contents from being evaluated. Commands can be typed or selected from look up lists. A command checker prevents incorrect commands from being entered. Good practice calls for starting each line with an in-line comment then the tool. That way it is easy to disable a tool and its associated movements with the checkbox. In-line comments are useful for describing what the lines on the Clipboard do.

Sample Clipboard line: (Face top of part) T01 SKIP-RP PATH1

Any words placed in parentheses will show in the post as a comment. The comment will also appear in the AutoCAD text screen when the program is run.

Click on the **Current Clipboard** button  to launch the current Clipboard dialog. The No. Tile tells you which Clipboard you are working with. Under the No. Tile, is a checkbox for Auto Insert TL Change. For the Heidenhain T-151 controller, this does not insert the M06 tool change code, but rather initiates a move to the tool change position. The chosen controller file will determine if the default for this box is checked or blank. The Coolant checkbox automatically insert the M-codes to turn the coolant on and off. The Look Up tile contains three buttons to call up the Tools Lookup list, the Defined Cycle lookup list, and the Command Assistant dialog to help you assemble defined commands correctly.

The last tile before the program lines is used to set your **Auto-Approach** and **Auto-Retract**. When you first started TahICAM, you set some parameters including Max Z+ Limit, etc. Auto Approach and Auto Retract use these parameters to govern Z-Axis movements when approaching and retracting from the path. Their default condition is set in TahICAM options.

The safest Auto-approach State is Jump-FP, which causes the tool to retract to the highest point before approaching the path. It then rapids toward the path but starts feeding when the Top Clearance is achieved. This setting is found in the startup dialog. An Auto-retract setting of JumpZ will cause the tool to retract to the same height as the approach.

The Edit boxes are the input fields where you actually organize and create your program. Each line holds up to 255 characters and spaces. Click in Line 1 to bring the cursor down.

First, you need to tell TahICAM which tool to use. Click on the Tools button in the Look Up tile. The Defined Tools dialog will appear. Highlight the tool you want to use and click Use.

Now click on the Cmds button. The Command Assistant dialog will appear. There are five columns of commands and modifiers available to choose from. The modifiers, Rate and Approach, allow you to modify the rate of tool travel and the way the tool approaches the paths. The third column, modifiers contains commands that modify the way the cutter follows a path. See Appendix E in the User guide for more information on modifiers.

# TahICAM Quick Start Guide

Release 03/03/03

The Commands column will contain all of the commands and path names available for use in your program. The commands are divided into categories according to the type of action. The arrangement is meant to aid in getting the commands listed in the edit box in the right order. Some lists are only available for certain types of commands.





The last column on the right, Type, contains the list of command types. These types include SINGLE, and TOOL by default. As new commands are created, other types, such as PATHS and SINKS, will appear. SINGLE contains stand-alone commands like PARK. The most common types, PATHS and SINKS, each contain a list of all of the paths and sinks you created. First choose the type, then the path name, then any modifiers you want. Pressing OK when the edit box line is built will place the contents of the line into the previously chosen Clipboard edit line.

The Cycles button launches a dialog from which to select canned cycles to be run on a path. Cycles must be shown on the edit line after the tool and before the path. Pressing OK adds the cycle at the cursor position.

Some rules to remember when creating your program include:

- Always call a tool at the beginning of your program.
- Use the safest auto-approach and auto-retract modifiers. Override them on the edit line when needed.
- Always place approach modifiers before and retract modifiers after the path commands.
- Always put the canned cycle command before the path or flag to be run.
- Remember to use PARK to move to the part change position at the end of the program.

## ***Reviewing and Posting Your Program***

Before you post your program, you should verify that it does what you want. Click on the **Run Clipboards** Button  to run a display of the complete program. When the animation starts, the Run Delay dialog appears on the screen. It can be moved out of the way and will display next time where you left it. The animation will pause until you release the dialogue. The stop button makes the run display stop at the end of the current polyline. The **Run Delay** Dialog  on the Run Clipboards Fly-out will re-launch the dialog for editing at any time. The **Run Resolution** Command  provides a way to change the cutter step size. The **Run Fast** Button  hides the program objects and displays cutter trails very fast.


You should view the tool movements in several different views. The top view, the front or side view, and an isometric view will prove invaluable in determining if there is a tool clearance problem in your program. The cutter trail will show only the total depth of a drill or tap cycle, not individual pecks. It is possible to see the cutter move in multiple viewports at once. The cutter trail will only show in the active viewport.


If you view the program with any of the program lines in the Clipboard unchecked, those lines will not be included in the display or the post. Standard Windows keyboard commands, such as Control-X (Cut), Control-C (Copy), and Control-V (Paste), all work when editing the program lines. Both backspace and delete work normally, too. Or, you

# TahICAM Quick Start Guide


Release 03/03/03

can position the cursor and type in the commands you want to add. All valid command entries are automatically changed to upper case upon leaving the edit box, so you don't have to worry about capitalizing your commands.

Once your program looks satisfactory on the screen, you can post it. Close the Clipboard and click on the **Post Program** Button . The Save Post to dialog will launch. Verify the post file name and path, then click the save button. On the command line, you will see that TahICAM is working the post. Remember, if any program lines in the Clipboard are not checked, they will not be included with the post.

Click on the **List Pgm** Button . The program will appear in WordPad. On some systems TahICAM may have trouble finding Word pad for you. If this happens, navigate to the post file in Windows Explorer and open it from there. You can review and manually edit the program while in WordPad or print a copy. When TahICAM is used correctly one should not need to manually edit the post. When you are finished reviewing the program, save and close your WordPad and drawing windows.

## ***Customizing the Post***

The **Edit Post Definition** Button  launches the definition file editor on the Post Program tool button fly-out. This editor will assist you in customizing your post for your particular control. The editor currently handles defaults for three styles of controls: Heidenhain, Fanuc, and Haas.

## ***Tech Support***

The program has evolved over the years to support the prototype machining we do in our shop. We have expended considerable effort to make the program as stable and easy to use as we can. However, we realize that problems may be encountered that we were unable to foresee. We hope that you benefit by using this program as much as we have.

When you have questions about TahICAM, please do a thorough search of available materials before contacting us by email. We are a real shop and the person that responds to you will be taking time from his regular duties to assist you.

Our new web site will be called [www.tahcam.com](http://www.tahcam.com). It will have TahICAM information that will be important to you. You will be notified when it goes up.

Technical support will be handled through our web site where you will find many resources to assist you. Review our on-line FAQ's and Tips and Tricks sections. We also plan an FTP site where on-line materials will be available. If you still have not found an answer to your question please send it to [support@tahcam.com](mailto:support@tahcam.com). We will research your problem and provide an answer as soon as we can.

Please visit [www.cadopolis.com](http://www.cadopolis.com) and see the forum where you may post questions about TahICAM. The fine folks at Cadopolis are handling on-line orders for us. If you wish to order by PO or Check email us at [sales@tahcam.com](mailto:sales@tahcam.com). Credit card orders can be placed over the phone by calling (520) 883-1536 between 7:30 A.M. And 3:30 P.M. MST, Monday through Friday. An authorization code will be sent back to you. Please cut and paste this into the appropriate box when prompted by Starting TahICAM.