

USING THE OPENLOOP VEHICLE MOTION GENERATOR [REAL-TIME-CLOCK]

If your application requires a **CURRENT-REAL-TIME** Fix, use this operational configuration in which TAPESTRY outputs an RF Signals consistent with **REAL-TIME-OF-DAY**. The provided modes include:

- Scenario Playback using **TIME-OF-DAY**
- Real-Time Interactive 6DOF Motion Generator at **TIME-OF-DAY**
- Basic RF Output at **TIME-OF-DAY**



JOYSTICK / KEYBOARD DRIVEN 6DOF



BASIC OUTPUT @ TIME-OF-DAY



SCENARIO PLAYBACK @ TIME-OF-DAY

6DOF COCKPIT TRAJECTORY GENERATOR

The COCKPIT Application provides an alternative method for:

- Constructing a Complex motion profile that can be imported into the *Build Scenario* Application.
- Constructing a Dynamic Vehicle Motion Profile at TIME-OF-DAY

To Start the Application, select the **Run Real-Time** Group → Open Loop - DYANMIC REAL-TIME



JOYSTICK Status
Green Detected, Red Not

NOTE: Connect the Joystick to a vacant USB connector *before* starting the Application or it won't be detected.

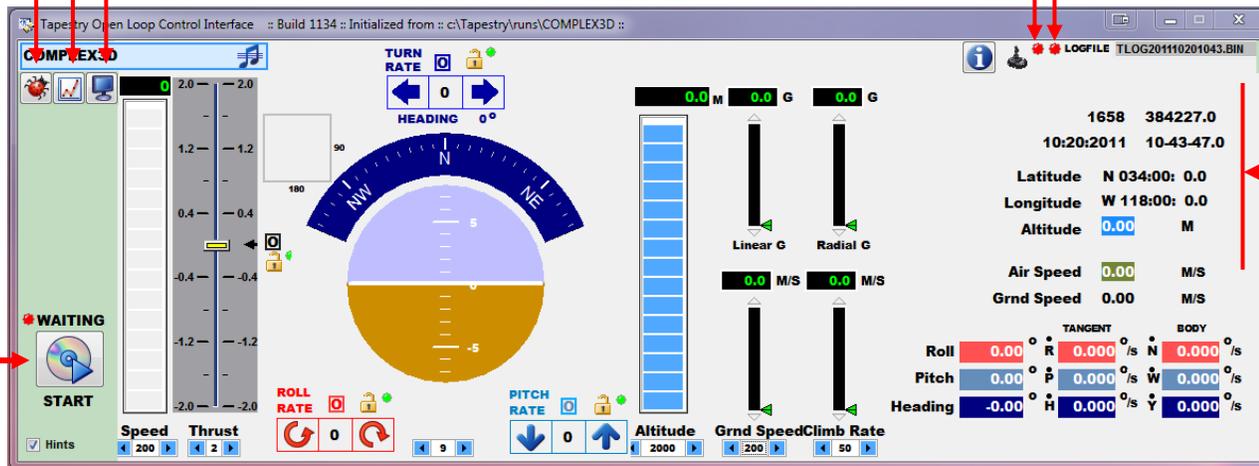
SETUP / MEMORY PEEK

SHOW 3D GROUND TRACK

CYCLE THROUGH GUI DISPLAYS

DATA LOGGING
Green Active, Red Not

NOTE: CLICK TO TOGGLE ON/OFF



<CLICK.>
TO CHANGE

START / STOP

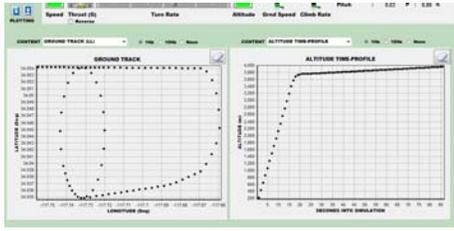
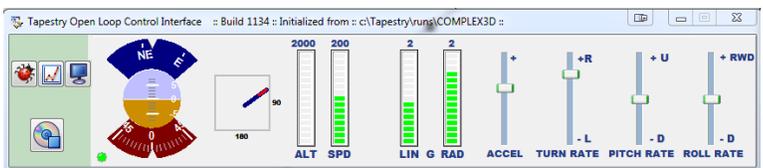
6DOF COCKPIT SETUP



SETUP FORM

TOGGLE TO SMALLER COCKPIT DISPLAY

SHOW GROUND TRACK

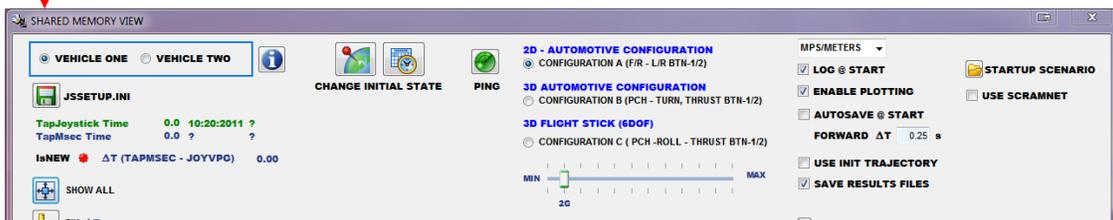


WAITING FOR RUN SCENARIO TO START AFTER THE PING WAS SENT - WILL TRANSITION TO RUNNING (SECONDS)



START / STOP

TOGGLE SHOW HINTS



TAPMSEC INPUT BLOCK CREATED BY THIS APPLICATION

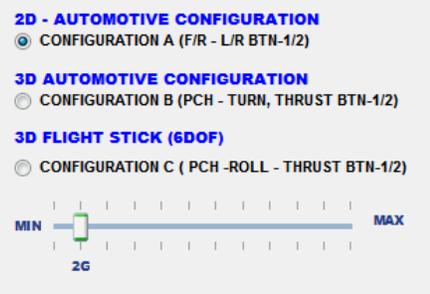
TRUTH DATA		[READ TRUTH BLOCK (from TAPJOY to TAPMSEC)]	
Time Of Block	395314.0 10:20:2011 01-48-34.0	Time Of Block	604800.0 ??:??:???? ??-??-??
X	0.000 m Vx 0.000 m/s	X	0.000 m Vx 0.000 m/s Ax 0.000 m/s ² Jx 0.000 m/s ³ Webx 0.0000000 r/s C ^e 0.0000000 0.0000000 0.0000000
Y	0.000 m Vy 0.000 m/s	Y	0.000 m Vy 0.000 m/s Ay 0.000 m/s ² Jy 0.000 m/s ³ Webx 0.0000000 r/s C ^b 0.0000000 0.0000000 0.0000000
Z	0.000 m Vz 0.000 m/s	Z	0.000 m Vz 0.000 m/s Az 0.000 m/s ² Jz 0.000 m/s ³ Webz 0.0000000 r/s C ^c 0.0000000 0.0000000 0.0000000

XPOS 0 YPOS 0 ZPOS 0 RPOS 0 POV 0 BTN 0

TAPMSEC OUTPUT BLOCKS CREATED BY TAPMSEC

STATUS BLOCK (from TAPMSEC)	TOP 0 BOTTOM 0	TIME BLOCK (from TAPMSEC)	TOP 0 BOTTOM 0	DBG BLOCK (from TAPMSEC)	TOP 0 BOTTOM 0
Time Of Block	604800.0 ??:??:???? ??-??-??	INITIALIZATION TIME COUNT	0	TAPMSEC TIME LAG	0.000
CPS TIME OF WEEK	0 ms	MOTION TIME COUNT	0	OUTPUT BLOCK ΔT	0.000
SIM STATUS	0	ELAPSED TIME	0.00 s		

SHARED MEMORY VIEW



JOYSTICK CONFIGURATION



6DOF COCKPIT VEHICLE MOTION CONTROLS

Pull the Slider to change the AIR-SPEED

Note: You can touch the control with the mouse and then use the Arrow Keys for fine control

UP/DWN change TURN

UP/DWN change ROLL

UP/DWN change PITCH

The screenshot shows the 'COMPLEX3D' control interface. At the top, a 'TURN RATE' control has a slider set to 0 and a 'HEADING' display at 0°. Below it is a heading indicator. To the left, a 'ROLL RATE' control has a slider set to 0. To the right, a 'PITCH RATE' control has a slider set to 0. On the far left, a vertical slider for 'Speed' is shown with a red arrow pointing to it, labeled 'Pull the Slider to change the AIR-SPEED'. The interface also displays various status indicators like 'WAITING', 'START', and 'Hints'. On the right side, there are several vertical bars for 'Linear G', 'Radial G', 'Altitude', 'Grnd Speed', and 'Climb Rate'. A data panel on the far right shows coordinates, time, and attitude values.

CLICK TO LOCK /UNLOCK CONTROL
GREEN LIGHT TO RED

CLICK TO FORCE RATE = 0

The image shows three control panels: 'TURN RATE', 'ROLL RATE', and 'PITCH RATE'. Each panel has a central display (0), a lock/unlock button (green light to red), and a force-to-zero button (red circle with a slash). The 'TURN RATE' panel also includes left and right arrow buttons for heading adjustment.

MINI FLIGHT PANEL TO AVOID COVERING RUN SCENARIO

TOGGLE BETWEEN TWO FLIGHT DISPLAYS



The top screenshot shows a 'MINI FLIGHT PANEL' layout with a heading indicator, altitude and speed gauges, and various rate controls (LIN G, RAD, ACCEL, TURN RATE, PITCH RATE, ROLL RATE). The bottom screenshot shows the full 'COMPLEX3D' interface with a heading indicator, speed/thrust gauges, and detailed attitude and rate displays.

2D - AUTOMOTIVE CONFIGURATION
 CONFIGURATION A (F/R - L/R BTN-1/2)



2D - AUTOMOTIVE CONFIGURATION
 CONFIGURATION A (F/R - L/R BTN-1/2)
 CONFIGURATION B (PCH - TURN, THRUST BTN-1/2)
3D AUTOMOTIVE CONFIGURATION
 CONFIGURATION C (PCH -ROLL - THRUST BTN-1/2)

MIN ———— MAX
 2G

3D FLIGHT STICK (6DOF)
 CONFIGURATION C (PCH -ROLL - THRUST BTN-1/2)

MIN ———— MAX
 2G

SET G LEVELS (MAX DISPLACEMENT)



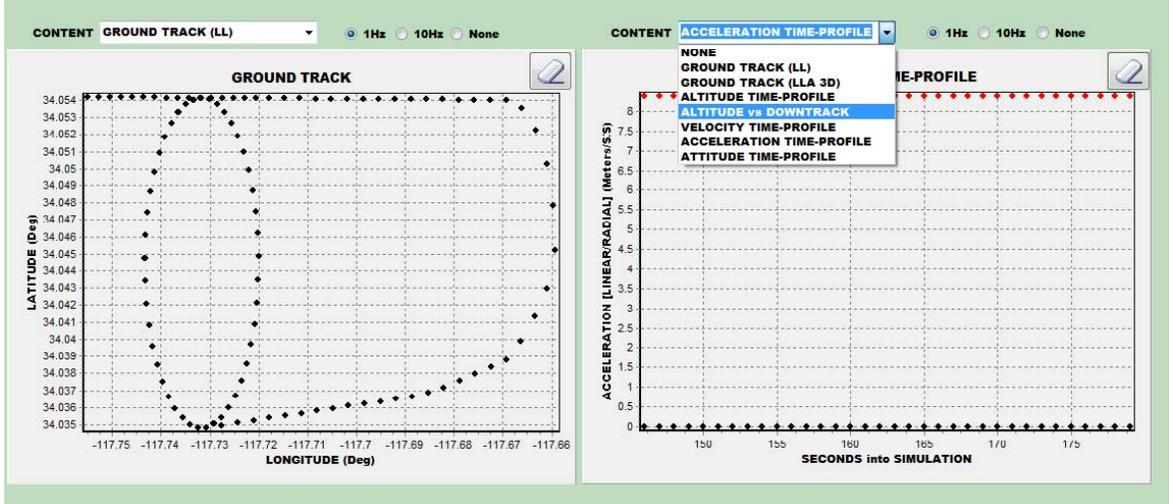
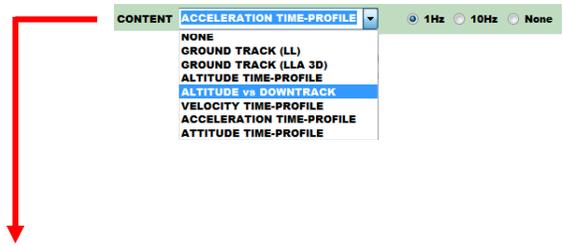
3D AUTOMOTIVE CONFIGURATION
 CONFIGURATION B (PCH - TURN, THRUST BTN-1/2)





PLOTTING

Plot windows can be configured separately run-time.



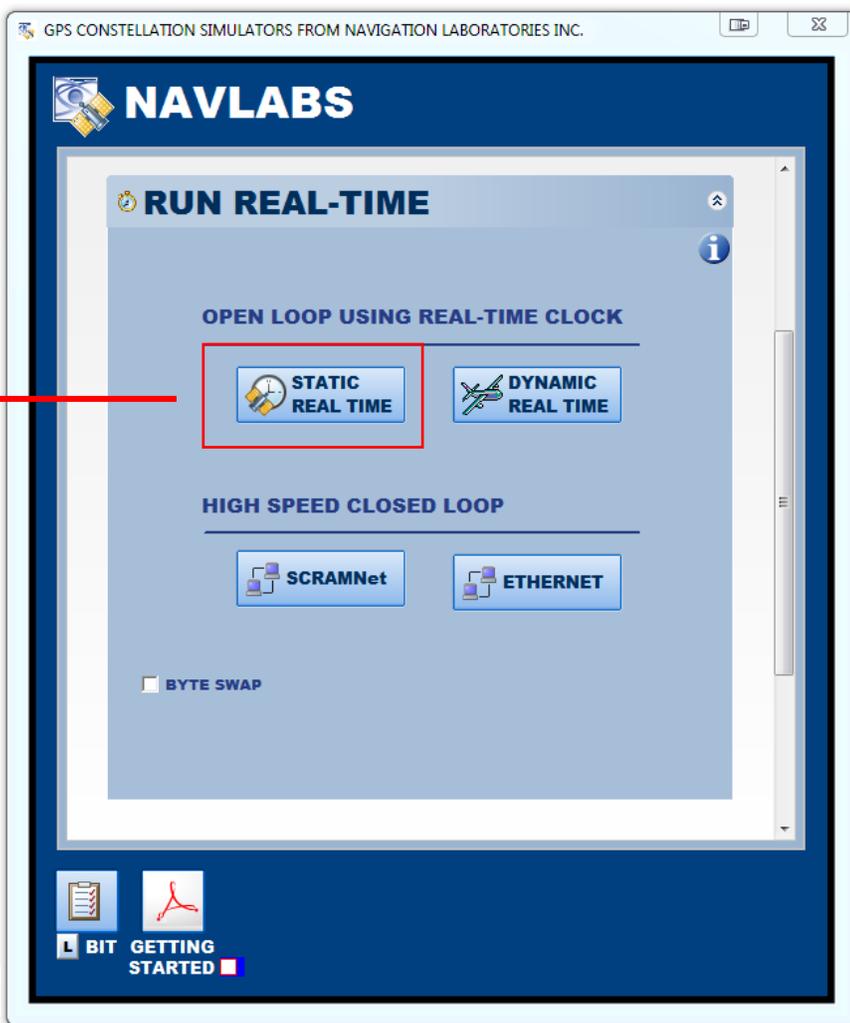
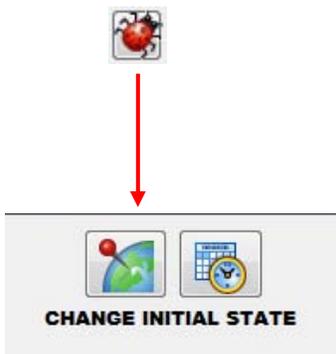
DATA RECORDING

DATA LOGGING
 Green Active, Red Not
 NOTE: CLICK TO TOGGLE ON/OFF

Data is saved in [Week Seconds](#)

BASIC RF OUTPUT @ TIME-OF-DAY

Press the Control and an RF Output will commence using the STATIC position as defined in the START SCENARIO. Adjust the Initial Location using the Setup Menu.



SCENARIO PLAYBACK @ TIME-OF-DAY

USE THE OPENLOOP MODE TO PLAYBACK A SCENARIO USING CURRENT TIME-OF-DAY.

This is for those applications that cannot go "back in time"

