ClearNav

TASK FUNCTION TUTORIAL
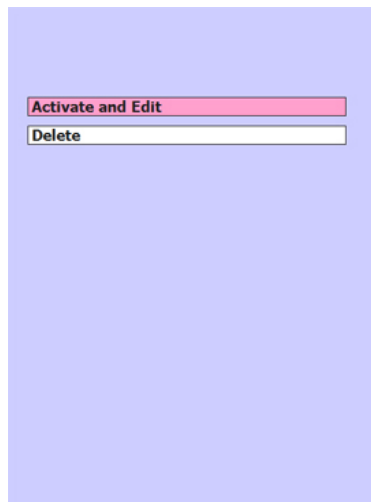
TASK LIST, EDIT AND ACTIVATE

TASK LIST SCREEN

TASK ACTIVATE AND EDIT

- The Task List Screen displays the task inventory, provides tools to create and edit tasks, or turns off ClearNav task functions.
- Select "**Turn Tasks Off**" to disable all task metrics and messaging on the ClearNav Moving MapScreen.
- As you move through the tasks in the directory rows, the initial waypoints will be displayed in a window at the bottom of the screen to facilitate task selection.
- Select a task or blank row to display the Task Edit/Control function menu:

- **Activate and Edit Returns** to the Task Edit. The red "Active" arrow is moved to the selected and activated task in the background.
- **Delete** - The selected task - No confirmation will be requested.

TASK EDIT

The Task Edit / Action / Map screens ares used to define the task geometry and turnpoints. Tasks are typically created before takeoff, but can be modified easily in flight using system default values and drop-down lists.

EDIT - *allows entry of task parameters - 1/ Task Type 2/ Rules.-3/Turnpoints-4/ Turnpoint Radius*

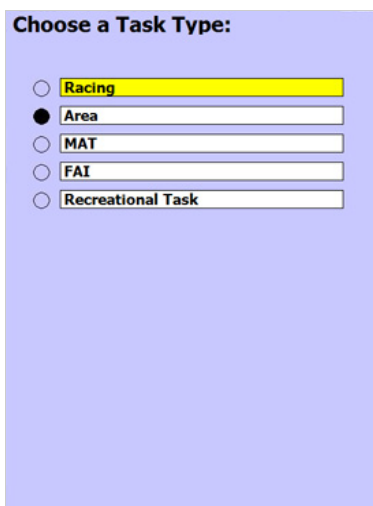**1. TASK TYPE** *is selected from a list of five options.*

2. RULES *for Start, Waypoint, and Finish geometry are specified in the rules screen - which defaults to values appropriate for the task type. See the table below for Task Rules & Defaults.*

3. TURNPOINTS *are selected from the window on the left and are inserted into the selected position in the right window.*

- *The Controller **Left/Right** Keys selects the windows. The **Up/Down** Keys selects the row - highlighting a Turnpoint to copy - or a target location to insert.*
- *The elipsis ('.....') represents a blank row.*
- *Turnpoints in the right window are deleted by inserting an elipsis in place of the turnpoint.*
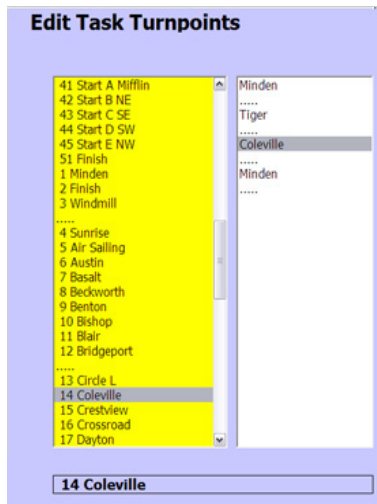
4. RADIUS *geometry for each Turnpoint can be set individually, if the default value is not desired.*

- *Highlight the Turnpoint and hit the Controller select button to display the radius adjustment screen.*
- *The Controller Up/Down keys will change the values.*
- *Start/Finish Geometry is adjusted in the window below Task Type.*

Edit Task Turnpoints

41 Start A Mifflin	Minden
42 Start B NE	.....
43 Start C SE	Tiger
44 Start D SW	.....
45 Start E NW	Coleville
51 Finish	.....
1 Minden	Minden
2 Finish	.....
3 Windmill	
.....	
4 Sunrise	
5 Air Sailing	
6 Austin	
7 Basalt	
8 Beckworth	
9 Benton	
10 Bishop	
11 Blair	
12 Bridgeport	
.....	
13 Circle L	
14 Coleville	
15 Crestview	
16 Crossroad	
17 Dayton	

14 Coleville

D: Area Minden

Turnpoint Radius Editor

51	Tiger	6
14	Coleville	6

ClearNav enforced rules, defaults and task characteristics follow. N/A indicates no value entry is allowed.

TASK TYPE RULES & DEFAULTS

CATEGORY	RULE	RACING	AREA	MAT	FAI
START	Geometry	Cylinder, US	Cylinder, US	Cylinder, US	FAI Sector
	Length/Radius	1.0	1.0	1.0	N/A
	Max Height MSL	5000	5000	5000	5000
	Time Below	2	2	2	N/A
	Speed Limit	None	None	None	None
TURNPOINT	Geometry	Point	Circles Only	Point	FAI Sector
	Radius	1 Mile	Area Specific	1 Mile	N/A
FINISH	Geometry	Ring	Ring	Ring	FAI Sector
	Length/Radius	1.0	1.0	1.0	N/A
	Min Height MSL	499	499	499	499
	Max Height MSL	None	None	None	None
TIME	Sunset	HH:MM:SS	HH:MM:SS	HH:MM:SS	HH:MM:SS
	Task Time	N/A	HH:MM:SS	N/A	N/A

SETUP - TASK ACTION AND TASK MAP SCREENS

The Task Action and Task Map Screen are typically used in flight to control the task ... provide guidance on required Turn Area penetration ... or perform speed/time calculations. These screens are also available using the Ribbon Menu Task function.
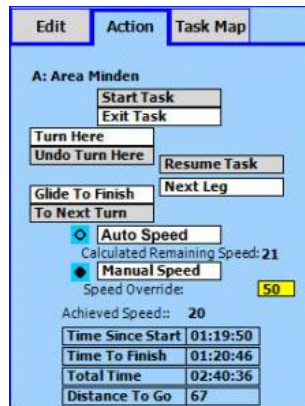
The Task Action Screen is provides centralized monitoring and control of all task phases. Refer to the table below to understand control features and impact.

The Task Map Screen provides an overview of the entire task and supplies Turn Area guidance using actual or entered speed values.
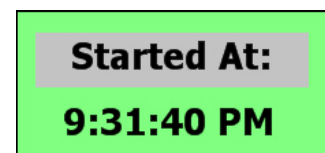
TASK ACTION SCREEN CONTROLS

CONTROL	ACTION
START TASK	Manually starts the task. Since the task will start/re-start automatically when you exit the start cylinder or cross the start line, you should never really need this option.

*A manual or automatic task start will display the "Task Started" message box.*

Started At:
9:31:40 PM

Task Start - Maximum Height Control

ClearNav start logic will also advise if the pilot is adhering to the pre-start start altitude rules. If the maximum start cylinder altitude is exceeded, a red alert will display until altitude falls below the cylinder maximum. At that point, a timer will display to count down the time below the cylinder maximum. The status will go to a green 'OK' when the time below maximum is satisfied.
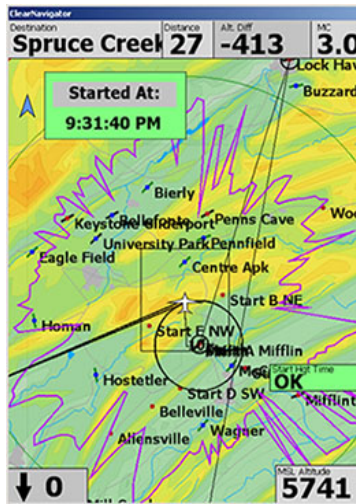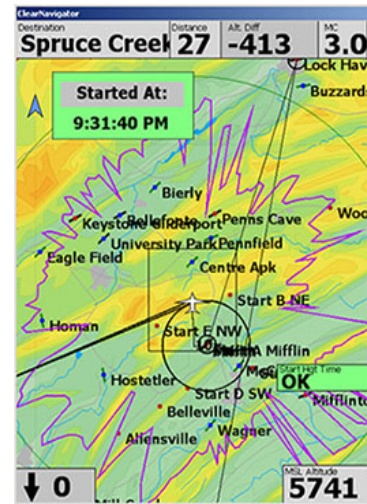
A Start was initiated ... and the pilot is below cylinder maximum altitude.

Start With Green Altitude Status
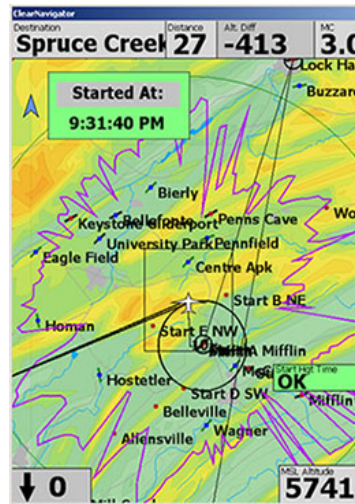
Warning that current altitude is above cylinder maximum

Count-down timer is activated when altitude falls below cylinder maximum.

ClearNav will monitor you time above the start cylinder maximum - outside the cylinder perimeter for an additional 10KM. This will insure you have an accurate status if you enter the cylinder from beyond the perimeter to start or re-start.

Start height control messages are advisory - you will get an automatic start (or can initiate a manual start) if ClearNav detects you have exited the start cylinder. You have to monitor the height control messages to insure you were below the maximum start height for the required duration.

EXIT TASK	*Aborts the task. All task metrics are erased.*
TURN HERE	*The task is redrawn with this point as the turnpoint - the active waypoint is changed to the next waypoint in the task.*
UNDO TURN HERE	*Cancels prior "Turn Here" if still in current turn area. Resumes navigation to the calculated ideal turnpoint within the current turn area.*
RESUME TASK	*Restart task after it has been suspended – i.e. when you have manually selected a Destination Turnpoint after the task is started. All task metrics from the last start are retained.*
NEXT LEG	*Commands navigation to next task leg for area tasks.*
GLIDE TO FINISH	*Commands calculation/display of 'Glide to Finish' Metrics.*

- *The Final Glide Window and Distance Window display the altitude difference and distance for a final glide around the remaining task turnpoints to the finish.*
- *The Destination Window changes to "To Finish".*
- *Glide To Finish button is grayed-out and the To Next Turn button is enabled.*
- *ClearNav navigates to the closest point on the bottom circumference of the Finish Cylinder. After crossing the circumference, ClearNav switches to the center of the Finish Cylinder at ground level as the navigation point.*
- *The altitude margin (Arrival Height AGL) vakue set in the Final Glide settings is added to the Finish Cylinder MSL altitude for calculating final glide margin.*

TO NEXT TURN	*Resumes display of final glide and distance to the active task waypoint.*
ACHIEVED SPEED	*Display of speed achieved from the last start to your current position.*