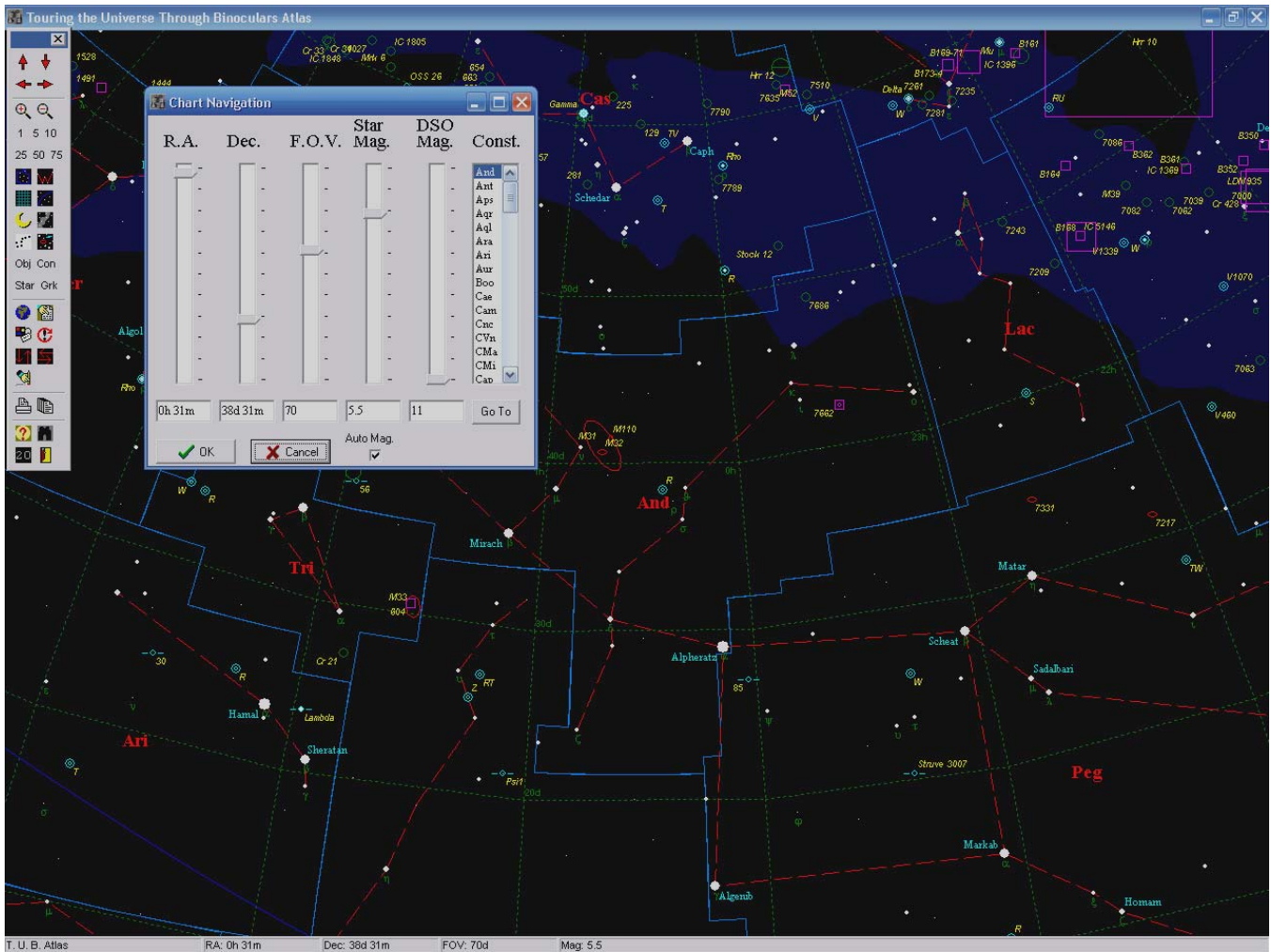# Touring the Universe through Binoculars Atlas Help File

Using the Atlas

The atlas charts are controlled with the floating toolbar pictured above along the left side of the screen. The function of each toolbar button is described below as well as several useful keyboard shortcuts.   Note that by "parking" the mouse pointer on top of a toolbar button, a short descriptive message will be displayed.

The next page discusses the controls from top to bottom.

Direction Controls

These 4 arrow buttons are used to "Scroll" the chart in the indicated direction. The four keyboard arrow keys may also be used. The actual distance moved is automatically optimized based on the current field of view.

Zoom Controls

The "Zoom" buttons include the two magnifying glass icons together with the 6 number buttons labeled from 1 to 75. You can zoom in or out a single step with the magnifiers, or jump to a specified field width with the numbered buttons. The plus and minus keyboard keys will also zoom as indicated.
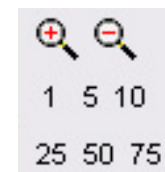
Content Controls

The buttons in the central section of the toolbar are employed to specify which chart elements should be displayed. The first 3 buttons toggle constellation boundaries, constellation figure lines and the coordinate grid overlay. The icon with the curved blue line turns the ecliptic line off and on. The moon icon toggles the display of deep sky and solar system objects and the next button controls the display of the Milky Way boundaries. The dipper button redraws the chart in black and white, which is useful for insuring the best possible gray-scale output on some color printers. The next button causes only stars and deep sky / solar system objects to be displayed, suppressing all other lines, labels etc. The "Obj", "Con", "Star" and "Grk" buttons toggle the labels for certain chart elements (deep sky and solar system object IDs, constellation names, bright star names and Greek letter labels).

Miscellaneous Controls

The globe icon opens the chart navigation dialog. Right clicking on an empty area of a chart will also open this dialog.

The button with the pointing finger icon is used to open the find object dialog, used to redraw the chart centered on the specified object.

The next icon will open the chart configuration dialog, which allows you to make permanent changes to chart content options, line and label colors, label fonts and other settings.

The button showing a circular arrow around an exclamation mark is used to redraw the chart using the initial settings used when the program was first opened. This is useful if, after moving, zooming or changing chart content, you wish to "go back" to your starting point.

The next two buttons, with the opposing arrows will flip the chart horizontally or vertically, toggling between normal and mirror images or inverting the chart. Telescopes or finderscopes

often show mirror imaged or inverted fields, so this button can be helpful for matching chart content to what is seen through the eyepiece. The vertical flip is also helpful for southern hemisphere users. Note that the chart configuration dialog provides a checkbox to make the inverted view the default setting.

Lastly, the button with the erasing hand icon will erase all Telrad markers from the chart.

Printing Controls

The printer icon is used to print the current chart. A printer setup dialog will be opened, allowing you to specify which printer, and which printer options to use. By changing between portrait and landscape format output you can create two different styles of charts. The portrait chart includes a descriptive legend, which is omitted from the landscape version. After a chart is printed you will be asked whether you want an object list report. This is a simple report listing the deep sky objects plotted on the accompanying chart.
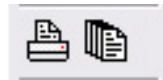
The button represented with a multiple page icon opens the printed atlas dialog. Using this dialog you can print multiple star charts covering the indicated area of the sky. The charts will all be printed in portrait format at a field size of 30 degrees. The "Print Object Lists" check box will follow each chart with a simple report listing the objects plotted on that chart.

Help and Exit Controls

The final group of toolbar buttons provides access to the help system and a way to close the atlas. The binocular icon opens a file that discusses what to look for in a pair of astronomical binoculars, while the "20" icon presents a list of Phil Harrington's 20 favorite binocular targets.

### The Object Identification Dialog

After clicking on a bright star, deep-sky or solar system object, you will be presented with this dialog. Technical details and comments will appear at the top of the main text window. The "Zoom & Center" control will center the chart on the object, changing the field of view to whatever value you select from the drop-down list. The "Center" button centers the chart on the object without changing the field size. A faster way to center the chart on a deep sky or solar system object, or a bright labeled star is to simply right-click on any of these objects. After a right-click the chart will recenter at that position with no
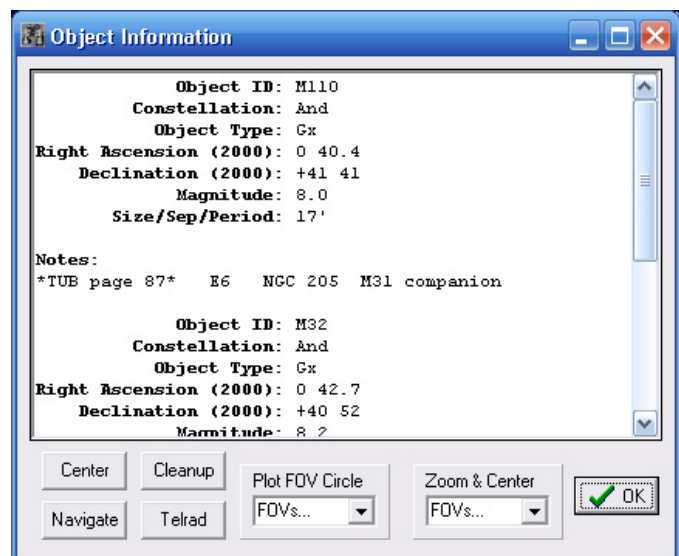
intervening dialog. The "Navigation" button opens the Navigation Dialog. The "Telrad" button will draw a Telrad pointing device marker centered on the object. "Cleanup" will erase any Telrad currently on the chart and the "OK" button closes the dialog.

The Navigation Dialog

The "slider" controls on this dialog are used to specify a new chart center, field of view size or star magnitude limit. After adjusting these controls you can click on "OK" to redraw the chart using the new values, or "Cancel" to ignore the changes. The "Auto Mag" checkbox indicates whether the magnitude limit is automatically calculated based on the field size, or if it is user-adjustable. By unchecking this box you will be able to force any desired star magnitude limit. The "Const" list control is used to center the chart on a chosen constellation. Simply click on the desired constellation and then click the "Go To" button.
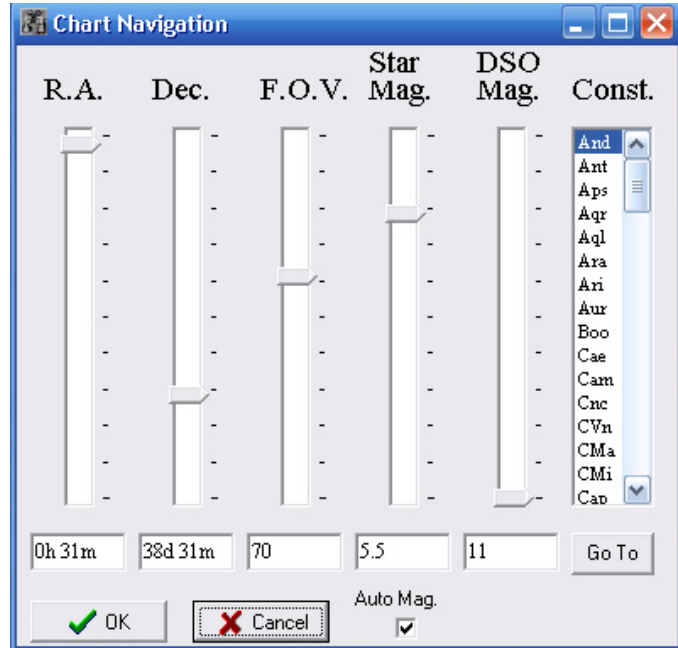
The Configuration Dialog

The controls on this dialog are used to specify which chart elements will be displayed, and which colors and fonts will be used. The "Initial Field Size" value will be used when you center on a constellation (refer to the section on the Navigation Dialog). The check boxes in the left side of this window indicate certain items that can be included on charts by checking. The "Southern View" check box can be used to invert the charts to appear as seen from the southern hemisphere. The large button labeled "Restore Option Dflts" will load "factory default" configuration values for the above settings.
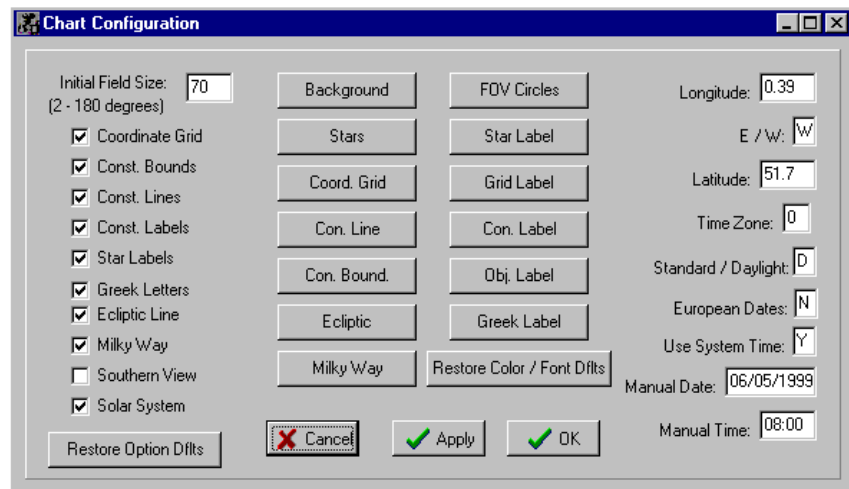
In the center section of this window there are buttons used to control the color of the indicated chart elements, and for specifying font styles and colors for the indicated labels. The "Restore Color / Font Dflts" button restores these settings to "factory defaults".

The text boxes on the right side of this dialog are used to specify values used in calculating the positions of the solar system objects (sun, moon and planets). Longitude and latitude store the location of your observing site. "E / W" indicates whether the longitude is east or west of the prime meridian, and the time zone value reflects time zones east or west of the meridian (negative values indicate east). The "Standard / Daylight" value should be adjusted to reflect whether the system time or manual time passed to the program will indicate standard or daylight savings time. "European Dates" controls whether dates will be displayed in the European format (X.X.1998). All dates must be entered in this dialog as MM/DD/YYYY. The "Use System Time" textbox tells the software to always use your computer's current date and time for the calculations rather than the manual date and time. If set to "N", the manual date and manual time values will be used.

The "Cancel", "Apply" and "OK" buttons are used to close this dialog. "Apply" will redraw the chart immediately with the new values whereas "OK" simply saves the values for use the next time a chart is redrawn.

The Find Object Dialog

This is the dialog presented when the user clicks on the "find" toolbar button. The value to be entered should exactly match the label value for a plotted object. This value is not case-sensitive. If found, the chart will be recentered on the indicated object.
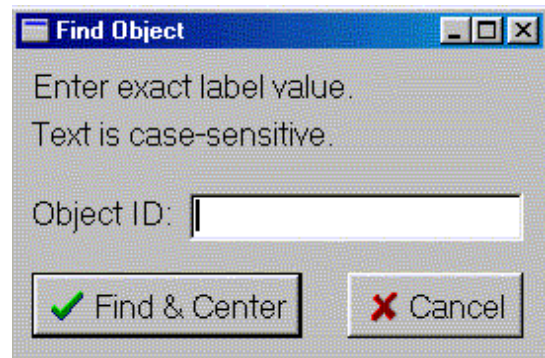
Recap of Keyboard and Mouse Shortcuts

Arrow keys:	Move the chart center in the indicated direction
Plus / Minus keys:	Increase / decrease the chart field size
Space Bar:	Hide and unhide the toolbar
Control-F:	Open the "find object" dialog
Control-P:	Print the current chart
Control-S:	Display scale indicator
Home Key:	Return to initial session chart settings
F1:	Open this help file

Left-click on a deep sky or solar system object to display the object ID window
Right-click on an object to center the chart on that position