

**DRAFT Choice for Windows Ver 2.00**  
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This READ.ME file contains information about DRAFT Choice for Windows that did not make it to the printed manual of Ver. 2.00, and gives brief installation instructions.

Please READ THIS FILE THOROUGHLY! It contains very important information, and reading it now will probably save you time and trouble later on!

**Shareware is NOT Freeware!**

Evaluate the shareware copy of DRAFT Choice for 30-days and give copies to your friends for evaluation. If, after the 30 days, you continue to use the program, then you need to purchase the license to use the program (register it) by sending us the registration/order form included on the disk or by calling 800-468-7487 (Orders Only!). You will receive the Latest version, Printed manual, 90-day free Technical Phone Support, BBS Technical Support, Newsletter, and Reduced price Upgrades.

In addition to that, the 'UNREGISTERED COPY' message will be eliminated from the screen and the printout. And, of course, it will get you the legal license to use the software beyond the 30-day evaluation period.

**If you purchased a Disk, without a printed, bound, user's manual, or you downloaded a copy from a BBS or other service, or you got a copy of DRAFT Choice for Windows from a CD-ROM, or the program was pre-loaded on your computer, then you do not have a licensed copy of the program, you only have a 30-day evaluation shareware copy. You need to purchase a registered copy for use after the 30-day evaluation!**

Support new developments in DRAFT Choice for Windows, register your copy today!

Thank you for your support!

## Minimum Hardware Requirements

- 386/486/Pentium Running Windows 3.1
- EGA or better video capabilities (VGA, SVGA)
- 3.5" Drive & Hard Disk

## **Last Minute Mods in v2.00**

-- While the Layer Dialog box is open, the color of each layer is displayed in a small square to the left of the Layer number. Furthermore, while in the same dialog box, clicking on the larger color box on the current layer will open a secondary dialog box that will permit you to change the current layer color.

-- While performing a File operation (Load, Save, etc.), highlighting a file name and clicking the left mouse button once displays size, date and time of the highlighted file.

\*\*\* Not Applicable after version 2.00c \*\*\*

## **Modifications/Enhancements in Release 2.00a**

[1] A modification was made to correct the problem of getting a run time error if the user clicked on a blank field while selecting a printer device driver from the File, Plot, Printers dialog box.

[2] Corrected a problem that would result in reversed images being printed if the user selected to print with the Screen option (rather than the Fit option) ON. The problem of printing more than what was visible on the screen (with Screen option ON), was corrected as well.

[3] The file Import/Export dialog module was updated to make certain that correct filename extensions are automatically assigned depending on the type of file selected by the user. The wildcard file name default and the file type selected are now also in sync.

[4] A modification was made to correct a problem of printouts having an incorrect aspect ratio if the Screen option was selected.

[5] If a secondary font has been assigned by the user, it is now automatically loaded as part of the drawing/configuration file.

[6] A correction was made to avoid a GPF if the user accidentally entered an aspect ratio of zero in the File, Config dialog box.

[7] The error message that appears if no symbol library is loaded and the user tries to use a symbol, as well as the prompt messages that appear when exporting a DCW or DCH file were cleaned up.

[8] A modification was made to make certain that when PLT (HPGL) files are imported, the correct layer assignment takes place. In earlier releases, the Layer assignment seemed to be offset by one.

[9] The problem of offsetting an imported DCW or DCH file and only being able to export the whole drawing in those two formats was corrected in this release.

[10] A message box was added to the File, Export, PLT file option, to remind the user that this option will only create an 8.5"x11" image file. If the user wants to create larger size plot files, then the File, Plot command should be used with the appropriate Windows plotter driver, re-directing

output to a file.

### **Modifications/Enhancements in Release 2.00b**

[1] Two new icons were added to the tool bar, corresponding to the very frequently used Image, Window and Image, Pan commands. (Note that some other icons had to be reduced in size in order to accommodate that).

[2] The Layer dialog menu was modified to correctly update the Visible and Protected flags for the currently highlighted layer.

[3] Delta X and Delta Y echo areas are now correctly restored following an aborted Circle/Arc drawing operation.

[4] Three new options were added to the program that enable the user to toggle the tool bars and the status bar On/Off. By toggling these Off, the user ends up with more usable screen area. The new options are In the File, Configure dialog box (they are saved as part of the configuration file), and they are:

Edit Tools: Horizontal Icon Bar  
Position Bar: Coordinate Echoing area  
Draw tools: Vertical Drawing Icon Bar

[5] A modification was made to the Alter, Style, Line-style pick list routine, so that if the user selects a line style and then clicks on OK (rather than double-clicking on the line style), the style selection registers and is carried to the parent dialog box.

[6] A modification was made to the File, Plot, Options routine (which invokes device-specific Windows dialog routines) to permit the program to accommodate changing print resolution with some updated HP device drivers that would might intermittent problems in the past.

[7] The printing module was modified to correct an error that would not permit printing of dotted lines on some high-resolution laserjet printers (HP 4P, 4MP, etc.),

### **Modifications/Enhancements in Release 2.00c**

[1] A number of new parameters are now stored in the DCWIN.INI file. A correction was also made to ensure that a number of parameters, which in earlier releases of the program were not read from the DCWIN.INI file, are now read when the program is started.

Now Saved to the DCWIN.INI file:

- o Orthogonal mode
- o Circle Aspect Ratio
- o Circle Type
- o Line Type
- o Line Thickness
- o Orientation (landscape/Portrait)
- o SI/IMP Units (From File, New)
- o Enhanced Printing Flag
- o Edit Array Angle (Individual Angle)

- o Auto Pick/Window flag (from File, Config menu)
- o Text Spacing

Now Read from the DCWIN.INI file:

- o X and Y Grid Spacing (The values saved in paper units)(\*)
- o X and Y Snap spacing (The values saved in paper units)(\*)
- o Array Type (Circular, Linear,...)
- o Text Height (the value is saved in paper units)(\*)
- o Text Width (the value is saved in paper units)(\*)
- o Fillet Radius (value saved in paper units)
- o A Fillet Length (value saved in actual dimensions)
- o B Fillet Length (value saved in actual dimensions)

(\*) These values are saved with INI file when the configuration file is saved, but there is no way to manually change them from within DCWIN. If the values are to be changed, then the user needs to use a text editor and edit the DCWIN.INI file.

[2] A correction was made so that now modifications in the File, Plot, □Factor result in the paper dimensions fields being updated if the edit box loses focus, i.e., if a different field in that dialog box is selected.

[3] A modification was made to permit value files to be imported with an origin other than 0,0. The user selected origin was ignored in previous releases.

[4] The orthogonal mode is now temporarily suspended if the user selects Draw, □Box, and it is re-activated when the drawing of the box is completed. In earlier releases, a box could not be drawn without first cancelling the Ortho mode.

[5] A modification was made to the way the program behaves when entering text at 90 degrees, so that it now is consistent with the DOS version, i.e., the cursor is placed to the right with each carriage return, instead of being placed on the line below.

[6] A correction was made to permit entering the first coordinate by typing from the keyboard, if a drawing command is invoked with one of the drawing icons. In earlier releases of the program, this was not possible, although the user could type in the first coordinate if the command was invoked from a □menu.

[7] A modification was made to now automatically load (import) the symbol file AUTOLOAD.SYM if it is found in the current directory when the program is started. This is very useful for users who have a reference symbol library that use all the time. The library could be renamed AUTOLOAD.SYM and placed in the DCWIN directory. It will then be loaded automatically every time the program is executed.

[8] A modification was made to 9-pin printer drive to correct a problem with the aspect ratio (circles plotted as ellipses).

[9] A new command was added - File, Save As. This new command will permit the user to save the current file under a different name, while the original File, Save command will now automatically save the file under the name it was opened. If the File, Save command is invoked after a File, New, i.e., when no file name has been assigned, the program automatically goes into the File, Save As mode.

[10] The Drawing-to-Paper scale for the current drawing is now reflected in the box presented by the File, Get Info command. Note that this is calculated when the file is opened (or created with a File, New command), based on the drawing extents. Therefore, if the drawing frame created by

the program to represent the paper is deleted, the Drawing-to-Paper scale reported will be incorrect.

[11] The Image, Pan icon (little target cross hair), now has dual functionality. If you click on it once it invokes the Pan mode. If you double click on it, it's equivalent to the Image, Update command.

[12] A correction was made so that File, New margin settings (when SI units are selected), are now calculated using mm instead of inches. This corrects the problem where, for example, in earlier releases, a left margin setting of 6 would result in 6 inches rather than 6 mm.

[13] A modification was made to re-enable the enhanced printout option (under File, Plot), which had been inadvertently disabled in some earlier releases.

[14] The program was modified so that if the B&W mode is set ON, selected elements during an edit operation are now visible. This modification is particularly useful for users with mono VGA systems.

[15] The Edit, Offset command was modified so that it now does not affect any subsequent Edit, Copy commands by incorrectly displaying the Offset prompt.

[16] The grid routine was modified to correctly display a grid on the screen at SVGA (1024) resolutions. Earlier releases would only display a grid on portions of the screen corresponding to an 800x600 resolution screen size.

[17] A modification was made so that if the Screen flag is ON, when printing, the correct aspect ratio is calculated and used with the printout. In earlier releases, the aspect ratio was correct only if the Screen Flag was toggled OFF.

[18] A correction was made to the file dialog to avoid the problem of the path, drive, etc. disappearing if a null file mask was specified.

[19] The drawing area window was adjusted by one pixel to avoid cursor flickering problems when the cursor would move across the tool bar and the drawing area.

[20] A new HPGL command is supported when importing plt files. This new DI command is used to specify text angles in the imported file.

[21] A new paradigm was introduced in the item selection sequence. If the pick mode is active and no item is found, when the left mouse button is pressed, then the pick mode automatically switches to Window mode and the cursor is anchored at that location. The Pick mode once again becomes active after the selection operation has been completed. This behavior is controlled by the Auto Window flag under File, Config. If the flag is OFF, then this new paradigm is inactive and the program behaves as in earlier releases.

[22] An I/O test is now performed when initializing the printer at program startup. This was to correct a situation where if a printer was not Physically connected to the computer (e.g., systems on Networked computers), the program might fail upon startup.

[23] The number of copies, angle and total angle, in the Edit, Array command, are now linked and are automatically updated.

[24] The program will now permit the user to enter formulas in any input box, similar to the DOS version of the program. The functions supported in that mode are the same as those supported under Option, Calculator. For example, when entering coordinates in feet, if the user wanted to enter 3 ft - 4 inches, he could enter  $3+(4/12)$ .

[25] A correction was made to the File, Import routine to correct an error where the file types would get out of sequence and cause the Import operation to fail.

[26] The tool bar is now updated after a File, New or File, Open operation. In earlier releases, a file opened with, let's say, the Perpendicular mode toggled on, would not update the Perpendicular icon and the user would experience what would seem like abnormal behavior when trying to draw.

[27] The printer driver pick list would limit the selection to the number of unique printers (no printer and port assignation combinations), which would make it impossible for the user to select some such combinations. The problem was corrected in this release.

[28] A modification was made so that the mouse in ON and the mouse pointer is still visible after the menu bar has been activated by pressing F10 or an Alt-letter combinations. In earlier releases, the mouse pointer would disappear, giving the impression that the program had crashed.

[29] The primary menu commands may now be selected by an Alt-letter key combination (Windows standard method), or by simply pressing the highlighted letter (DRAFT Choice for DOS method), for consistency.

[30] When using the cursor keys for moving the cross-hair, two new keys are now active. Pressing PgUp increases the movement step size by 10 pixels. Pressing the PgDn key resets the step size to one pixel. This permits faster, but still pin-point accurate positioning of the cross-hair cursor.

[31] A modification was made to now automatically load (import) the drawing file AUTOLOAD.DCW if it is found in the current directory when the program is started. This feature should be very useful for users who start with the same template for every drawing (e.g., with a template containing a sign-off block, a company's logo, etc.)

[32] The visibility of the grid and the rubber band line (when in editing and panning operations) was increased significantly.

[33] The tool icons were re-done to include shading, and hinting was added to them. If the mouse cursor is simply placed on an icon, a small rectangle explaining what that icon does appears on the screen. Whether these hints appear or not is controlled by the Hint toggle under File, Config.

[34] The File Load, Save, Import, Export dialog was replaced with a Windows type standard dialog to make use of the program easier by adhering to standards used in other Windows applications.

[35] A correction was made so that the program now exports the second native (DRAFT Choice) font as well, when PLT output is specified.

[36] True Type fonts may now be exploded just like any other complex entity. Once exploded, they become complex entities that can be manipulated independent of Windows, i.e., they lose their True Type font ID and they become DRAFT Choice native entities.

[37] A modification was made to permit a complex entity that results from joining other entities to exceed 256 total points (up to the maximum number of points accommodated by the buffer, which depends on the system setup). In earlier releases, such an error would result in a GPF. Now the program simply processes the maximum number of points it can accommodate and then exits the join routine. If the user is not satisfied with the resulting complex shape, he/she can always use

the UNDO command to Un-Join the elements and then join them in smaller groups, as desired.

[38] An error was corrected that would cause the program to produce unpredictable shapes if a complex entity was accessed using the Complex, Modify, Control command. The problem would normally manifest itself if the selected entity contained more than 20 points.

[39] A significant enhancement was made to the text entering/modifying routine. When the user selects Text, Place (or clicks on the Text icon), an input dialog box appears that permits the user to enter text, as before, and/or select the font type and parameters that would normally ONLY be accessible through the Text, Set-Up command. The same input dialog box also appears when the user selects Alter, Text. The user, therefore, may now change the font attributes for text already entered in the drawing.

[40] The Font selection window now identifies types of fonts. A 'TT' preceding the font name indicates a True Type Font while a 'DC' indicates a Draft Choice Vector font. If no indicator is present, then the font is bit-mapped. This is particularly helpful with the introduction of the ability to explode TT fonts. In earlier releases, the user had no way of knowing if a font that was selected was True Type, or not.

[41] A new selection was added to the Text alignment options (Under Draw, Text, Setup). The Fit flag permits the user to select two points and then automatically sizes the typed text to fit within those two points.

[42] Input fields, in dialog boxes, are now capable of scrolling the entered text and accepting up to 80 characters. This is particularly useful when entering a formula rather than a value in such an input field.

[43] A modification was made to correct the behavior where if a user invoked the Scale, Rotate, Corner, Tween or Array command and canceled the picking operation without any objects having been selected, the program would re-enter the above menu rather than exit back to the ready mode.

[44] The program was changed to make certain that reference marks used for drawn entities are not simply assuming the inverted color of the background. They now take the color of the layer they are on.

[45] A modification was made to the module importing coordinate files. In earlier versions, if an XYZ file was being imported, the X and Y coordinates supplied by the user for the insertion point were swapped.

### **Modifications/Enhancements in Release 2.00d**

[1] A modification was made to the DXF import module so that it now reads over (ignores) portions of the DXF file enclosed in curly brackets (used by AutoCAD for extended entity information.)

[2] A correction was made to the sequence of tabbed fields in the File, Plot dialog box.

[3] The Spline and Tape complex entity modules were updated to correct an error that would not permit such entities to be filled until a Complex, Modify, Join command was executed.

[4] The File, New, SI selection setting will no longer automatically default to a paper unit setting of 10 when selected. Two separate variables are now used to store the unit values in the DCWIN.INI file. "SIVALUE" holds the value for SI units and "IMPVALUE" stores the value for Imperial units. In addition to that, a modification was made so that now the SI flag is NOT reset, if the user selects and executes the Units command.

[5] A slight modification was made to the new routine (added in 2.00c) which permits the user to change the font assigned to a text string. In 2.00c, every time a new font was selected (using Alter, Text), the rotation angle in the dialog box would be set to about 5.729 degrees. The problem was corrected in this version, so that no rotation takes place unless the user specifically requests it.

[6] A modification was made to make the grid dots more visible. This would be particularly useful in cases where the user selected a high intensity background color.

[7] A correction was made to the DCH file type import module, to correct a behavior where if a DC 2.15 for DOS file was imported, a subsequent File, New would result in a half size drawing frame on the screen.

[8] The DXF import/export module was updated to include record flag type #70, in block (symbol) definitions. Lack of this record type might result in AutoCAD 12 not being able to import DXF files exported by Draft Choice for Windows.

[9] The number of available colors that can be selected for a layer was increased from 16 to 64. In order to accommodate the fact that some of these colors are dithered, and would map differently when drawing a line than when filling a complex object, another modification was made. The color button that was used to reflect the layer color (left of the tool bar), was divided into two sections. The left section reflects the selected color as it would appear when filling in a complex entity, and the right section reflects the color that would be assigned to entities themselves (lines, boxes, circles,...). It should be noted that the selected layer (dithered) color applies to complex objects filled with a solid pattern. The color used for entities is also used for bit-mapped and hatched patterns.

[10] A correction was made to the Edit, Corner routine, to eliminate the problem of not filleting correctly under some unit/scale combinations, in particular when horizontal and vertical lines were involved in the operation.

[11] A modification was made to the symbol management module, to avoid potential system problems if the sequence File, Open command followed by the Symbol, Use, Cancel command was used repeatedly.

[12] The Symbol module was also modified so that now symbol names are proper case (instead of upper case), which makes them more readable (in particular in the scroll list). Furthermore, the routine now retains the position of the last selected symbol, which ends up in the dialog window in subsequent Symbol, Use commands.

[13] A modification was made to not allow the user to select a menu option during an image updating process, until the process finishes. In earlier versions, this was possible and it would possibly end up generating a GPF.

[14] The DXF import module was updated to initialize the closed polygon flag at the beginning of the process for each polygon. Since this is not a required flag, and some complex lines in DXF files from other programs might not have it, earlier versions of DCWIN would use the last flag status, thus sometimes resulting in incorrect results.

[15] The built-in calculator module was updated to trap run time errors generated if the selected operation resulted in an overflow or underflow.

[16] A new option was added in the File, Configure dialog box. The new option, Arrow, sets the size of arrow heads used in creating the leader lines. The value stored in the field is the arrow height in the current paper units, i.e., inches or mm. This value is stored in the "AHEIGHT"



parameter in the DCWIN.INI file if the configuration file is saved. It should be noted that the size of arrow heads used in dimension lines is controlled through the Text size. A further modification was made to permit the arrow heads in leader lines to be scaled just like any other entity (as part of the leader line itself).

[17] A modification was made to the print module of the program, to make certain drawings can be automatically faxed, when using fax printer drivers, like the Delrina WinFax, through the File, Plot menu. In earlier versions, the faxed images would sometimes be offset on the page, resulting in only a small portion of the drawing being transmitted..

### **Modifications/Enhancements in Release 2.00e**

[ 1] A modification was made to permit the selection of objects for use with the rubber command when the Ortho mode is active.

[ 2] A new flag was added to the Units dialog box. This flag "Fraction" when toggled ON, causes the inch fractions to be displayed as a fraction n/d where  $d[\max] = 2^{\text{Fix}}$ . For example, if the "Fix" parameter in the units dialog is set to 3, then fractions of inches will be interpreted as n/2, n/4 or n/8 (since  $2^3 = 8$ ).

[ 3] A correction was made to the line type assignation routine, so that now a line type "None" for filled polygon, is NOT displayed on the screen, or printed, as it was originally intended.

[ 4] The beeping sound indicating that the undo buffer was full, was eliminated based on many requests by users. It would get annoying if the buffer was full and the user selected 200 elements for an edit command, as it would beep once for each element that could NOT be placed in the buffer, i.e., 200 times.

[ 5] A modification was made to ensure that the program uses the start-up directory when looking for the DCWIN.INI file.

[ 6] A correction was made to the program in order to ensure that when a white background is selected, selected elements are visible during the creation and editing process.

[ 7] A modification was made to avoid the problem of text rotation angles being interpreted as radians when importing AutoCAD DXF files.

[ 8] The problem of not being able to display a large number of selected elements during a dynamic Edit operation was eliminated by creating an off-screen bitmap of the drawn objects.

[ 9] A modification was made to eliminate the entire screen update that would take place automatically every time text was altered in DCWIN.

[10] The phantom cross hair cursor that used to appear on the screen if the cursor was placed in the drawing area during a screen update was eliminated.

[11] A problem was eliminated that would result in the menu bar going blank when importing drawings created with DRAFT Choice for DOS.

[12] A modification was made to ensure that the Snap mode is temporarily toggled OFF while selecting elements for the Edit, Extend command.

[13] The program was changed so that now the paper size setting in a retrieved drawing override the settings in the configuration file.

[14] Default File extension types were added to the File, Import dialog, next to the file descriptions.

[15] A modification was made to the program so that the fix value (in the Units dialog box), and the large/small grid dot option (in the Options, Grid dialog box), are saved in the DRAFT Choice .INI file when the user saves the current configuration.

[16] The scroll bar logic was modified to be consistent at all zoom factors. It should be noted, however, that the screen cannot scroll below the bottom of the drawing and above the top. It should also be noted that the scroll bars have no effect when the image fills the screen after an Image, All command.

[17] A modification was made to the memory management portion of the program, in order to avoid a situation in which the program would run out of memory because only a total of up to approximately 3.5 Mb was being allocated (though File, GetInfo would report more memory). In long DCWIN sessions, or when importing and or editing large drawings, this problem might have resulted in GPFs and other illegal operations in earlier versions of the program.

[18] A modification was made to the code used to move a symbol to a new layer, to be consistent with DRAFT Choice and DRAFT Choice Plus for DOS. The "moved" symbol now assumes the color of the currently assigned layer. In order to invoke this new mode, the variable BRS may be set to TRUE, in the .INI file (it can be done with any plain text editor program). The default value of BRS is BRS=FALSE, which keeps each element making up the symbol in its original layer, i.e., permits multi-color symbols.

[19] A modification was made to the Image, Window command to ensure that the window clipping process would place the center of the selected window in the center of the screen.

[20] A correction was made to permit arrows associated with leader lines to be filled with the Alter, Fill command.

[21] A modification was made to the way the Perpendicular mode works in the program. In earlier versions, clicking on the perpendicular toolbar icon would ONLY permit you to draw a line perpendicular to the last line drawn. In this new release, by turning the attach mode ON, you may draw a perpendicular line to any line you desire, by simply making certain that the first specified point is on that line.

### **Modifications/Enhancements in Release 2.00f**

[ 1] A modification was made so that if the user executes the File, SaveAs command sequence and presses ESC without specifying a file name, subsequent File, Save commands will not issue an error message as unable to save the file.

[ 2] A correction was made to the Add/Subtract option in the edit list (F5). In earlier releases, the program would not mark/unmark the entities correctly, which would result in the wrong entities being edited.

[ 3] A modification was made to the printing routine, so that now, the area under the print window is NOT restored using thick line styles, as it would happen in earlier releases.

[ 4] File, New now sets an internal factor to a value that permits small entities (e.g. 100mm x 100mm boxes), to be visible on the screen. Formerly, the bounds set by the program were so large that entities of that size would be invisible. It should also be noted that the Image, All command will only permit a change in the overall extents up to a factor of 1000 each time it's executed.

[ 5] A modification was made to the Windows response to the WM\_Activate (this message is issued whenever focus is changed to/from DCWIN). This modification should correct the problems users are reporting when running the program under Windows for Workgroups.

[ 6] The height and width of a print job, used in conjunction with the File, New, Orientation are now saved with the file. In earlier releases, because this value was not saved with the file, the height and width used for printing, after retrieving a file was based on the previous File, New command settings.

[ 7] The Subtract mode is now canceled automatically when the current edit command is completed.

[ 8] The Undo command now operates on a single polygon at a time, whereas in earlier releases it would undo the last block of polygons.

[9] A correction was made to eliminate the problem where the program would use up to 50K RAM each time the file loading status dialog was displayed, e.g. each time a file was opened.

[10] A minor modification was made to the About DCWIN dialog box to correctly display the telephone number of our UK distributor (a '2' was missing from the number in earlier releases).

[11] The program will now truncate layer names to the max 9 characters allowed, when opening files created with DRAFT Choice Plus. (DRAFT Choice Plus supports up to 12 characters in layer names).

[12] Files created with DRAFT Choice for DOS v2.15 may now be imported into current drawings. Earlier releases would permit opening a file created with DC215, but NOT importing it.

[13] A correction was made to the way fill patterns and layer colors interact when the transparent option is used in the fill pattern dialog box. This was done to eliminate the problem of layers seemingly assuming a different color for certain background color selections set by the user.

### **Modifications/Enhancements in Release 2.00g**

[ 1] The operation of the File, Export, PLT command now correctly exports text to the created file. In earlier releases, True Type text in the drawings would show up as horizontal lines in the generated plot file.

[ 2] A correction was made to the pen plotting routines in order to make certain that elements assigned a line thickness of 'NONE' do not get plotted.

[ 3] The operation of the Complex, Modify, Control command was corrected so that the original complex element is removed after the Control action is completed.

[ 4] A screen re-draw is forced now, when a user selects File, Plot, Options, Options using an HP Deskjet Driver. Earlier releases would not update the screen, thus forcing the user to execute an Image, Update command.

[ 5] Selecting the Alter, Rubber command no longer cancels the Orthogonal and Snap modes.

[ 6] The +/- icon is now updated after the Alter, Rubber and the Edit, Warp commands are executed.

[ 7] The Pick mode will now correctly select an element in an unprotected layer, even if the element overlaps another object in a protected layer.

[ 8] The Export, DXF module was modified so that the created DXF files contain the \$EXTMIN, \$EXTMAX, \$LIMMIN and \$LIMMAX variables. These variable not being in the header seemed to be a problem when importing DXF files created by DRAFT Choice for Windows into MS-WORD, EXCEL, and TurboCAD for Windows.

### **Modifications/Enhancements in Release 2.00h**

[ 1] A correction was made to the pen plotting routines in order to make certain that elements assigned a line thickness of 'NONE' and a 'TRANSPARENT' fill pattern do not get plotted.

[ 2] A .PIC file import option was implemented in this release of the program to ease the transition process from the DOS version of DRAFT Choice and permit DCWIN to edit graphs created by TRIUS' AS-EASY-AS and other spreadsheet program.

[ 3] The UNDO function is no longer hooked into the {ESC} key (repeat last command feature). In earlier versions, If UNDO had just been selected and the {ESC} key was pressed immediately after it, another UNDO command would be executed.

[ 4] At the request of many users, a modification was made to the program to minimize the unintentional loss of the drawing currently in RAM. A special prompt was implemented in this release, which prompts the user to save the current drawing before opening another file or creating a new one, if the current drawing has been modified!

[ 5] A modification was made to the "Edit, Tween" command to temporarily turn off fill patterns associated with the selected objects, until the operation is completed at which time the fill patterns are restored. In earlier releases, the internal exploding process, which is required to be performed prior to Tweening, would be bypassed if the complex element had been assigned a fill pattern. This would result in incorrectly calculating reference points and segments for the created objects. It should be noted that even in earlier releases, if the user manually turned off the Fill option, the Tween command would work properly.

[ 6] A modification was made to re-enabled use of the [F3] function key to invoke the pop-up calculator.

[ 7] A modification was made to clear the error message "Unable to Open File" when importing symbol library files. (Note that the symbol library would get imported correctly even though the error message appeared). Whether the error message appeared would depend on the contents of the symbol library, as some element types would reset the error flag when being imported.

[ 8] The "File, Export, PLT" command now correctly exports text entered using the DCWIN font files (.FNT) to the created PLT file. In earlier releases, only true type text in the drawings would export properly, whereas text created with native DCWIN fonts would appear as a straight line.

[ 9] A modification was made to prevent a division by zero run-time error upon invoking DCWIN. When starting the program and internally setting up the default parameters, the extents of the drawing area are undefined and the behavior of the program depends on the assumed values. In earlier releases of DCWIN, if these assumed values happened to be zero, such a run-time error would occur and the program would abort.

[10] The DXF module of DCWIN was modified so that names of imported symbols are no longer case sensitive. Earlier releases of the software would correctly import symbols containing lower/proper case names into the library, but embedded symbol(s) would not appear in the drawing.

[11] A modification was made to permit importing .DCW files which was a problem with earlier releases.

[12'] A modification was made so that the program performs an automatic Image, All action as soon as a drawing file is opened.

[13'] The installation routine was modified so that it no longer checks for device PRN. In earlier releases, the installation might fail with a Run-time Error 003 if no PRN (LPT1) device was detected.

[14'] A modification was made so that the program now checks to see if created symbols are based on other symbols, at the time of creation, and if that is the case, the selected symbols are internally exploded before the new composite symbol is created. Furthermore, if an attempt is made to load files containing symbols that are defined in that recursive manner, only the first symbol in the defined sequence is loaded.

[15"] A new error message was added to the program to let the user know if the maximum element count has been exceeded while loading a DXF file.

[16"] A correction was made to eliminate the problem of positioning the drawing in the upper left corner of the paper, under some conditions, regardless of the setting of the top and left margins.

[17"] A modification was made to the way the program searches for program and data files. The path for executable, font files, fill pattern files, line definition files, and help file is now obtained from the path specified in the command (program) line in Windows, not the path specified in the Start-Up directory area.

## **Modifications/Enhancements in Release 2.00i**

[ 1] A modification was made to the screen I/O routines which should result in faster screen updates under most circumstances.

[ 2] New File Export and File Import capabilities have been incorporated into the program, that permit the user to export the current drawing to BMP (Windows Bitmap) and WMF (Windows Metafile) file formats, and also import BMP and WMF files. It should be noted that some of the information contained in the Metafile is NOT imported into the DC drawing, as there are no equivalent type records.

[ 3] The "Win" menu command was expanded to accommodate the ability to handle the two new file types. The new command structure is:

*Win, Copy\_Text* Copies user-selected text to the Windows Clipboard

*Win, Copy\_Bitmap* Copies user-selected portion of the screen to the Windows Clipboard, as a bitmap.

*Win, Copy\_Metafile* Copies user-selected objects to the Windows Clipboard in Windows Metafile Format.

*Win, Paste\_Text* Copies text from the Windows Clipboard into drawing

*Win, Paste\_Bitmap* Copies bitmap from the Windows Clipboard into drawing. The bitmap is pasted with its lower left corner at 0,0 coordinates.

*Win, Paste\_Metafile* Copies metafile from the Windows Clipboard into drawing. The user is prompted to specify an insertion point. Note that the specified point will be the center of the pasted Metafile.

*Win, Save\_to\_Bitmap* Saves user-selected portion of the screen to a Windows BMP file.

*Win, Save\_to\_Metafile* Saves entire drawing to a Windows Metafile.

[ 4] The algorithm used to manipulate Polylines was modified so that such elements are not broken into simple lines before manipulating them. This should result in increased speed for processing such entities.

[ 5] A correction was made to the Options, Fill command. In earlier releases, the selected fill pattern was automatically advanced by one every time the menu was accessed.

[ 6] A modification was made so that the layer attribute information stored in the DCWIN.INI file is now correctly used to initialize the arrays when a File, New command is executed.

[ 7] The final print dialog message informing the user that the output size exceeds the paper size was modified to also echo the paper size as reported by the Windows device driver for the printer/plotter currently selected.

[ 8] The File, Exit dialog was modified so that it now also includes the option "Cancel", which permits the user to change their mind and return to the program, if the Exit option is selected in error. The same dialog also appears when the File, Open command is executed

[ 9] The screen aspect setting is now properly saved to the configuration file (DCWIN.INI).

[10] The module used to import bitmapped files was modified so that now imported bitmapped files (though still only overlaid temporarily on the screen for tracing purposes), are resized with the rest of the elements by any of the View commands.

[11] A modification was made to the File, Open routine so that the user may now select "DCH (DC for DOS)", and "\*. \* All Files" from the filetype selection list.

[12] In earlier releases of the program, when importing a bitmap, the program automatically used the system palette which would limit the number of colors to 20. A modification was made that now permits the program to use the actual palette of the bitmap, resulting in superior quality images.

[13] The File, Export, DCH command was modified so that the exported file header is now compatible with the DOS version files and can be imported by DRAFT Choice.

[14] A correction was made to the Layer module, to eliminate the problem where the Visible and Protected layer markers would not line up with the headings if the layer names were very short.

[15] Imported bitmaps were assumed to be 256 colors. If they weren't, the image would be shifted by a number of bytes equal to  $(256 - \text{Actual\_bitmap\_colors}) * 4$ . This was corrected in the new release.

[16] A modification was made to the DXF import module to correctly import values preceded by a space. In earlier releases, such entries in the DXF file would be interpreted as labels with a value of zero.

[17] A modification was made to the Undo command to correct the problem where selecting Undo after placing a dimension (using Measure, Boundary), on the screen, would result in undoing the boundary dimension, and undoing the command issued just prior to that.

[18] A new option button was added to the dialog box that appears during a File, New, or File, Save operation asking to save the current file, or not. The new option "Cancel" permits the user to cancel the File operation and return to the drawing mode.

[19] A new option flag was added to the File, Configure Dialog - the "Path Store". The default status of this flag is off, in which case the program operates in the way it always did. If this flag is checked, however, the program keeps track of the File - Open, File - Save, File - Import, and File - Export paths independently. Furthermore, it also creates a file in the program's directory (DCPATH.INI), so when the program is started next time, it initializes the four paths to what they were last time the program was used.

### **Modifications/Enhancements in Release 2.00j**

[ 1] The Measure, Wquery, Area command was modified so that it now displays the calculated area in current units, hectares, and acres.

[ 2] A modification was made to the program so that the current file name is displayed in the title bar of the DCWIN window.

[ 3] The Leader drawing command was modified to temporarily suspend the Orthogonal mode, until the Leader has been placed. This was done to avoid the conflicting criteria of the Ortho mode and the leader line check to determine whether it was above/below the horizontal from the original reference point.

[ 4] The Measure, Query, Length command was modified to display the measured length in the current units, including the "ft.in" type which displays fractional rather than decimal inches.

[ 5] The Layers dialog was modified to permit up to 12 characters for the Layer name, and to also make it possible for the user to select Visual and Protected by simply pressing Alt-V and Alt-P.

[ 6] A correction was made to make certain that Arcs, Beziers, etc. remain visible during an "Edit" operation. In earlier releases of the program, such selected elements might either not move or temporarily disappear until the edit operation was completed.

[ 7] A modification was made to the plotting routine to eliminate a problem that would force a pen plotter to make multiple passes on each line segment, and would cause drawing printouts to be unreasonably dark even when the enhance option was not selected.

[ 8] The DXF Export routine was modified to eliminate a redundant specification of the layer information that would appear after Polylines and might result in AutoCAD not being able to import the file issuing an error message about a duplicate layer.

[ 9] The DXF Export routine was modified to filter out any Polylines with a single vertex, as such elements are not supported by AutoCAD.

End.-