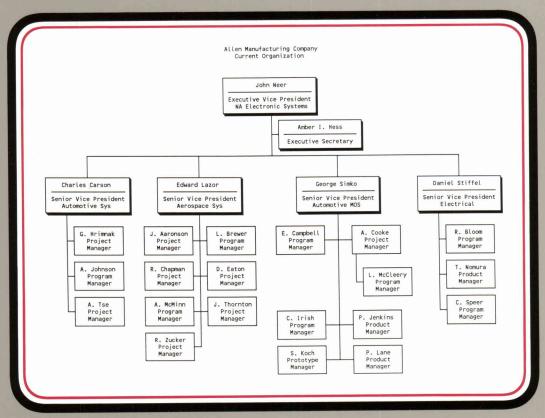


Org Plus makes Organization Charts ...Quickly and Professionally

You enter the information. Org Plus formats and draws with perfect spacing.



Actual printed chart (reduced).



Program by Kenneth Lafferty Hess

Documentation by Kenneth Lafferty Hess and Ann M. Tse

This program is dedicated to Connie and Amber Victoria for being so patient during its creation.

© Copyright 1985, 1986, 1987 Banner Blue Software Incorporated All Rights Reserved

Fifth Edition (November 1987)

The information contained in this User's Guide changes periodically. These changes will be incorporated in new editions.

Your questions and comments about the program and documentation are welcome.

Banner Blue P. O. Box 7865 Fremont, CA 94537 (415) 794-6850

IBM is a registered trademark of International Business Machines Corporation.

1-2-3 is a registered trademark of Lotus Development Corporation.

Sideways is a trademark of Funk Software, Inc.

WordStar is a registered trademark of MicroPro International.

SuperProject and SuperCalc are registered trademarks of Computer Associates International, Inc.

Contents

Chapter 1	Introduction to Org Plus1-1
	What Org Plus Can Do1-1
	Using this Guide
	What You Need
	README
Chapter 2	Getting Started
-	One- or Two-Diskette Drive Systems
	Starting a One- or Two-Diskette Drive System 2-2
	Installing Org Plus on a Fixed Disk
	Starting a Fixed-Disk System
	Printer/Setup
	Exiting Org Plus
Chapter 3	Building an Organization Chart
	Commands
	Making Choices 3-1
	Getting Help 3-2
	Backing Out
	Some Essential Terms
	Starting a Chart
	Editing Fields 3-9
	Adding Subordinates to the Work Group 3-10
	Additional Work Groups
	Moving Between Work Groups 3-13
	The Command Menu 3-15
	Titles & Annotations
	Print 3-17
	Reprint 3-20
	Saving a Chart
	Clear 3-21
	Retrieving a Chart
	Erasing a Chart

Chapter 4	Tables and Reports 4-1
•	Table Setup
	View Table
	Header & Titles
	Print Report 4-5
	1
Chapter 5	Managing Numbers5-1
	Amount Commands
	Display Amounts
	Labels 5-4
	Formula Setup 5-4
	Number Format 5-12
	Adjust Amount
	Print Control
	Mode of Calculation
	Calculate
Chapter 6	Other Commands 6-1
-	Selecting Ranges 6-1
	Edit Chart
	Insert Position 6-2
	Move Position
	Delete Position
	Copy Information
	View Clipboard
	Sort Subordinates 6-7
	Marking Positions 6-8
	Find & Mark 6-8
	Assign Marked 6-11
	Unmark Positions 6-11
	Review Marked 6-11
	Chart Commands
	Preview Chart
	View Chart Status 6-12
	Options 6-13
	Set Option 6-13
	Clear Option 6-16
	View Options 6-16
	Draw Auxiliary Line
	Modify/Delete Line

Index	
Appendix C	Memory Utilization and Other Org Plus Limits C-1
	Advisory Level Positions B-6 What to Put in Text Field 1 B-7 Underlining Names and Other Fields B-7 Alternate Text Fields B-7 More Than Two Levels of List or Columnar Chart Style B-8 Examples B-9
	BIG Boxes
	Trading Off Between Chart Width and Height B-3 Staff with Subordinates B-3
Appendix B	Chart-Making Tips and ExamplesB-1Making Your Chart NarrowerB-1Making Your Chart ShorterB-2
	Selecting Menu ItemsA-2Moving Between FieldsA-2Using WordStar CommandsA-3Org Plus Menu TreeA-4
Appendix A	Key Assignments A-1 Editing Text in a Field A-1
	Advanced Printing 6-19 Special Formats 6-20 Print-Time Codes 6-21 Hidden Positions 6-22 Print Part 6-24 Reprint Part 6-24 Plotters 6-24 Print to Disk 6-25 Sideways™ 6-26 Print to Screen 6-28 File Commands 6-29 Append Chart 6-29 Save Branch 6-29 Exchange Data 6-30

Introduction to Org Plus

What Org Plus Can Do

Org Plus automatically prints tree diagrams for a wide range of applications. You can use Org Plus for organization charts, work breakdown structures, family trees, and more. Just enter the names and comments. Then Org Plus draws and spaces the boxes, positions the text, and precisely lays out the connecting lines.

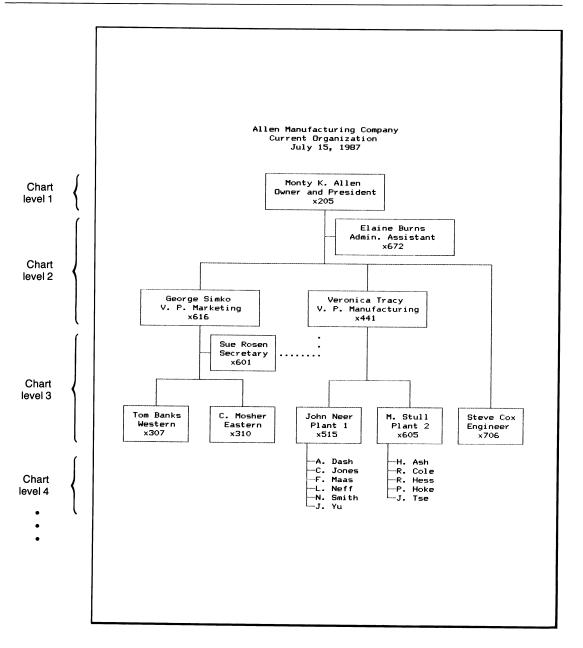
A simple diagram can have a single name in each box. The boxes in a complex diagram can contain up to six numbers and twelve lines of text, including four on the outside corners. Seven chart styles are available.

Keep track of numerical information such as salaries, commissions, budgets, office space, and project hours with a mini-spreadsheet for each position. Org Plus does the arithmetic so it is easy to compare results by position, branch, or level.

You can search, count, and classify positions, too. Org Plus will work with your existing classifications or grades.

Now Org Plus also prints simple tabular reports, like phone books, from the information in your chart. And its exciting, new ability to recognize names from around the world is a real time saver. Enter names in your chart first-name-first. Then Org Plus can do the hard work to sort and print your reports last-name-first.

Finally, Org Plus gives you a complete set of editing capabilities that let you insert, delete, and move positions. You can update charts in minutes.



A typical organization chart

Using this Guide

Chapter 2: Getting Started, tells how to install Org Plus for use with your computer and printer. Everyone should read this chapter.

Chapter 3: Building an Organization Chart, is a tutorial that describes how to use the basic capabilities of Org Plus. Read this chapter even if you plan to use Org Plus to make other types of tree diagrams.

Read the other chapters as your needs require.

Chapter 4: Tables and Reports, is a tutorial that shows you how to produce a tabular report such as a phone book.

Chapter 5: Managing Numbers, discusses how to use the mini-spreadsheets for counting, classifying, and consolidating.

Chapter 6: Other Commands, describes how to use the Options commands to customize the format of your chart. In addition, you learn how to modify and restructure your chart, print using Sideways™, and more.

Appendix A: Key Assignments, puts all key assignments in one convenient location. This appendix also describes advanced cursor movement and text editing commands.

Finally, Appendix B: Chart-Making Tips and Examples, is a useful collection of advanced ideas.

Note: Most examples in this guide refer to an organization chart because that is the most common use for Org Plus. Don't let that discourage you from using it for other applications.

What You Need

Org Plus requires an IBM personal computer or 100% compatible computer. It must have at least 320KB of memory and a double-sided diskette drive.

You also need IBM Disk Operating System (PC-DOS) Version 2.0 or above and a printer or plotter.

README

The Org Plus diskette also contains a program named README. This program gives you additional information about Org Plus. You will find advanced topics, the latest tips, and troubleshooting information.

Follow these steps to read this information:

- 1. Make sure DOS is loaded and the DOS default drive prompt is on your screen. In other words, if your default drive is A, the prompt on your screen is A >.
- 2. Insert the Org Plus program diskette in your default drive.
- 3. Type readme and press Enter \leftarrow .
- 4. Use the Cursor Up \(\bar{1}\) and Cursor Down \(\bar{1}\) or Page Up \(\bar{PgUp}\) and Page Down \(\bar{PgDn}\) keys to scroll through the information.
- 5. Press Escape Esc to exit the program and return to DOS.

Note: The ASCII file README.DOC contains the same information. You can also print the information on your printer. Place the Org Plus diskette in drive A, turn on your printer (loaded with continuous form paper), then type printdoc

Getting Started

This chapter contains information and procedures you need to start using Org Plus.

One- or Two-Diskette Drive Systems

If you plan to use Org Plus on a one- or two-diskette drive system (without a fixed disk), you should first make a working copy of the program diskette.

You need a blank, formatted, double-sided diskette to make the working copy. Then follow these steps for a two-diskette drive system:

- 1. Make sure DOS is loaded and the DOS default drive prompt is on your screen. In other words, if your default drive is A, the prompt on your screen is A >.
- 2. Insert the Org Plus program diskette in the default drive.
- 3. Insert the blank, formatted, double-sided diskette in drive B.
- 4. Type workcopy and press Enter ←.
- 5. Remove the diskettes after the copying process is complete.
- 6. With a soft-tip pen, label the copy Org Plus Working Copy.
- 7. Store the Org Plus program diskette in a safe place. Use the working copy for all other procedures in this guide.

Note: If you don't have two diskette drives, use the DOS DISKCOPY command to transfer all files to your working copy diskette. Write protect your Org Plus program diskette before using DISKCOPY.

Starting a One- or Two-Diskette Drive System

If you have a system with one or two diskette drives (without a fixed disk), proceed as follows:

- 1. Make sure the DOS default drive prompt is on your screen. For example, if your default drive is A, the prompt on your screen is A > .
- 2. Insert the Org Plus diskette in the default drive.
- 3. Type org and press Enter ←. You can type org in either lowercase (small) letters or uppercase (capital) letters.

After several seconds you see the Org Plus Main Menu and copyright notice. This screen also tells you what version of the program you have.

If this is the first time you have used Org Plus, proceed to the section "Printer/Setup."

Installing Org Plus on a Fixed Disk

Make sure that you have installed DOS on your fixed disk before you begin.

Then follow these steps to install Org Plus on a fixed-disk system (such as a PC XT):

- 1. Make sure the DOS default drive prompt is on your screen. For example, if your default drive is C, the prompt on your screen is C > . If you plan to put Org Plus into a subdirectory, make sure it is the current directory.
- 2. Insert the Org Plus program diskette in drive A and close the door. Then type a: f d and press Enter | -|.
- 3. A message appears on the screen to tell you that installation is taking place.
- 4. When installation is complete, remove your Org Plus diskette. Store it in a safe place.

Starting a Fixed-Disk System

If you have a fixed disk (such as a PC XT), make sure that both DOS and Org Plus are installed on your fixed disk. Then follow these steps to start using Org Plus:

- 1. Make sure the DOS default drive prompt is on your screen. For example, if your default drive is C, the prompt on your screen is C >.
- 2. Type org and press Enter . You can type org in either lowercase (small) letters or uppercase (capital) letters.

After several seconds you see the Org Plus Main Menu and copyright notice. This screen also tells you what version of the program you have.

If this is the first time you have used Org Plus, proceed to "Printer/Setup."

Printer/Setup

Org Plus needs some information about your printer and disk drive. You go through this procedure only once because Org Plus saves the information from work session to work session.

If you haven't already done so, start Org Plus as described in "Starting a One- or Two-Diskette Drive System" or "Starting a Fixed-Disk System." Then follow these steps:

 Select Printer/Setup from the Main Menu. Press the Cursor Down ↓ key to highlight Printer/Setup, then press Enter ←. Or, just type the letter p. A list of printers is displayed.

2. Select your printer:

a. If your printer is listed by name, use the Cursor keys,

↑ ↓ → ←, to select your printer and press Enter ←.

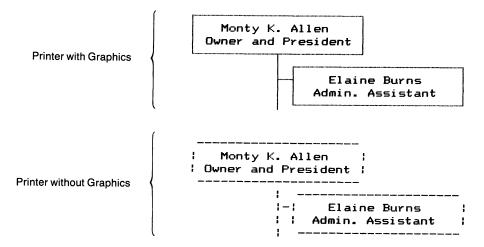
For plotters and laser printers, both portrait and landscape orientations are available.

Note: Many Okidata printers have electronics that make them behave like the IBM Graphics Printer. If you have one, choose **IBM Graphics** instead of Okidata.

b. Some printers are not listed by name. Use the Cursor keys, \(\begin{align*} \begin{align*} \b

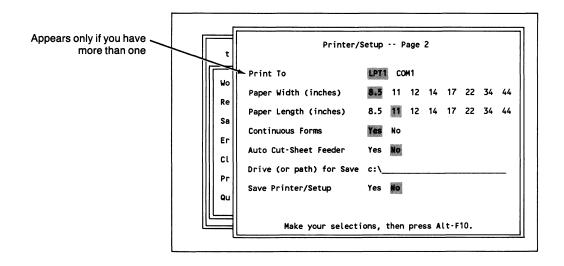
For some selections additional messages or questions are displayed. Otherwise, Printer/Setup — Page 2 is displayed.

Note: Some printers cannot print smooth, solid lines. For example, the selections named Other print dashed lines. Thus, your printed output appears in one of two ways:



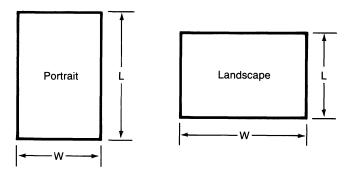
If you have a letter quality printer with a 10- or 12-cpi typing element, you may want to purchase a 15-cpi element. A 15-cpi element allows you to put a larger chart on the same size piece of paper.

3. If your system has more than one connection for a printer, the first choice is Print To. Use the Cursor Right key → to select the connection to the printer chosen above and press Enter →. If you have just one printer port, no Print To choices will appear. If the ports that appear on this list are not correct, refer to the README program for further instructions.



4. The first choices for systems with one printer connection are Paper Width and Paper Length. Use the Cursor Right key → to select the width of the paper in your printer and press Enter ←. Do the same to select the paper length.

Note: Plotters and laser printers can print in either portrait or landscape orientation. Choose paper width and length accordingly:



5. The next choice is Continuous Forms. If your printer uses continuous forms (each sheet of paper connects to the next one), select **Yes** and press Enter —.

If your printer automatically loads the next sheet of paper (like most laser printers), you should also select **Yes**.

If you manually insert single sheets of paper into your printer, select **No** and press Enter —.

6. If your printer has a cut-sheet feeder attached, select Yes for Auto Cut-Sheet Feeder, and press Enter ←. Most sheet feeders leave a large top margin; selecting Yes compensates for this. This setting will be ignored if you are using a laser printer. Generally you should also have Continuous Forms set to Yes if you're using a sheet feeder.

7. The next line is Drive (or path) for Save. Type the drive to which you want to save organization charts. For most two-diskette systems, type b: For most fixed-disk systems, type c:

Note: Path is an advanced DOS concept. Its use is optional.

Make sure your selections are correct. If not, you can use the Cursor keys $\uparrow \downarrow \downarrow$ to return to a line and change the selection.

8. Then, for the line labeled Save Printer/Setup select **Yes** and press Enter . (Or press and hold Att), then press F10. This tells Org Plus your choices are complete.)

All the printer/setup information you enter stays on the program disk or diskette. Org Plus automatically gets this information each time you start the program.

Note: If you want to make a temporary change in the setup, follow the above steps, but select **No** for Save Printer/Setup. Org Plus forgets the new settings when you leave the program.

9. If you chose a serial connection for your printer (the IBM asynchronous communications ports COM1, COM2, etc.), Org Plus displays the form Printer/Setup — Serial to specify additional information. Otherwise, Printer/Setup — Page 3 is displayed (described below).

The preset values for Printer/Setup — Serial are common ones. Check your printer or plotter manual to make sure these values are correct for your device. If you have an HP plotter (models HP 7470A, HP7475A, or ColorPro), Org Plus displays an image of how the plotter's switch block should appear. Change the settings on your plotter to match those shown. This switch block is valid ONLY for HP plotters.

10. Printer/Setup — Page 3 allows you to customize Org Plus. To change the field labels that Org Plus uses, simply type in new ones. (Chapter 3: Building an Organization Chart, describes the use of these labels.)

In addition, you can set up Org Plus for international money and numbering conventions. To change the sign for the display of money just type in a different one. Then choose to place the money sign before or after a number. The decimal point can be a period or a comma.

Press Alt - F10 when your choices are complete.

If your computer has a graphics display adapter, Org Plus will ask you to choose the colors for your display. Otherwise, the setup process is now complete.

Exiting Org Plus

You can exit from Org Plus by selecting **Quit** from the Main Menu.

To select Quit, press Cursor Down \downarrow to highlight Quit on the Main Menu and press Enter \leftarrow . Or, type the letter q.

If you have worked on your chart without saving it, Org Plus warns you. Select **Yes** to lose the chart and exit to DOS. Select **No** to return to the Main Menu for another chance to save your chart.

Building An Organization Chart

This chapter covers some basics about the use of Org Plus. Then it takes you step by step through the construction of a typical application, an organization chart.

Commands

Commands tell Org Plus what you want to do next. This chapter describes the most important commands.

You start most commands by pressing a function key. These keys are labeled F1 through F10. On most PCs, the function keys are located at the top or the left side of the keyboard. Sometimes you need to press and hold Alt, Ctrl, or Shift, then press the function key (for example, Alt - F2). You can see a summary of these keys in Appendix A: Key Assignments.

After you start a command, Org Plus frequently displays a menu or question with several possible answers to choose from.

Making Choices

When Org Plus presents you with a menu or "multiple-choice" question, you can respond in either of two ways:

- You can highlight the choice by using the Cursor keys,

 ↑ ↓ → ←, then press Enter ←.
- Or you can type the first letter of your choice.

Both methods of making a choice are available at all times.

Getting Help [F1]

You can press [f1] for help at any time.

A Help window appears in front of the screen you are using. The Help topic is the one judged appropriate given your location in the program. You can choose any other Help topic by making a selection at the bottom of the Help window.

Some help topics fill more than one window. A message tells you when there is more. You can scroll through these long topics using \boxed{PgUp} and \boxed{PgDn} or the Cursor keys $\boxed{\uparrow}$ $\boxed{\downarrow}$.

You can leave Help by selecting Exit or by pressing Esc.

Backing Out Esc

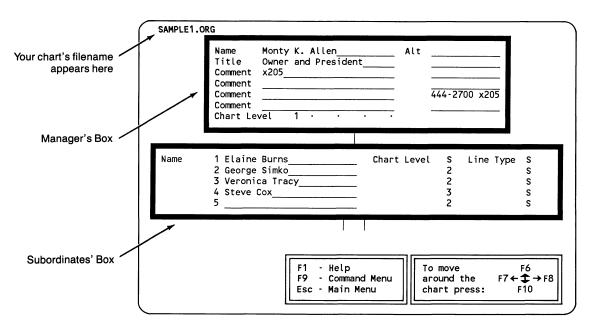
You can press Esc to back out of Org Plus one step at a time. If you keep pressing Esc, you will reach the Main Menu. Then select **Quit** to return to DOS.

Some Essential Terms

This section explains some terms that describe how Org Plus works.

Work Group

The term work group refers to an individual manager and his or her direct subordinates (if any). A work group is the building block that Org Plus uses to construct charts. Org Plus displays one work group on the screen at a time.



A Work Group

Manager's Box

In the work group display, the box at the top is the manager's box. It contains information about the manager of the work group.

Subordinates' Box

The subordinates' box is the lower box in a work group. It contains a list of the positions that report directly to the manager.

		Name Monty K. Allen Title Owner and President Comment Comment Comment Comment Chart Level 1 · ·	444-2700 x205	
	Name	1 Elaine Burns 2 George Simko 3 Veronica Tracy 4 Steve Cox	2 2	pe s s s s
To a lower work group		Title V. P. Manufacturing Comment x441 Comment		To a higher work group
Name	Comment Comment Chart Level 2 · · 1 John Neer 2 M. Stull 3	444-2750 x441 • • Line Type S	e S S S	

Moving around the chart

Moving Around the Chart

The term moving around the chart refers to the process of changing from the display of one work group to that of another. This lets you work with large charts that cannot fit on your display all at once.

Org Plus lets you move around your chart as if the organization chart were laid out in front of you. You can move up, down, and sideways to see work groups at different levels of your organization.

Chart Level

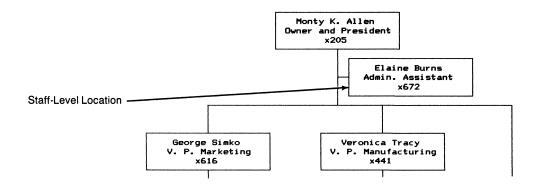
A chart level is a single tier or layer of the chart (see the sample chart on page 1-2). A given chart level includes the staff level described below.

Staff Level

The term staff level refers to a special location on the printed organization chart. Staff level is located between a manager and his or her other subordinates. Many organizations like to place secretaries and administrative assistants in this special location.

Note: Some organizations distinguish between line and staff *functions*. That is not the meaning used in this guide. Often, staff functions, such as a legal department, have many subordinates. They should not be placed at a staff-level location.

You place a position in the staff-level location by placing an s in the Chart Level field. A manager can have as many positions in this location as you like. Positions placed in this location have strict limits on subordinates they may have (see Chapter 6: Other Commands).



Siblings

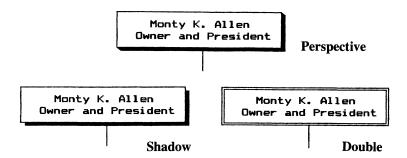
Siblings are a group of subordinate positions that directly report to the same manager. (Elaine, George, Veronica, and Steve are siblings in the sample chart on page 1-2.)

Branch

A branch of the chart consists of a manager and all reporting positions below. The positions below may be reporting directly or through another manager.

Box Style

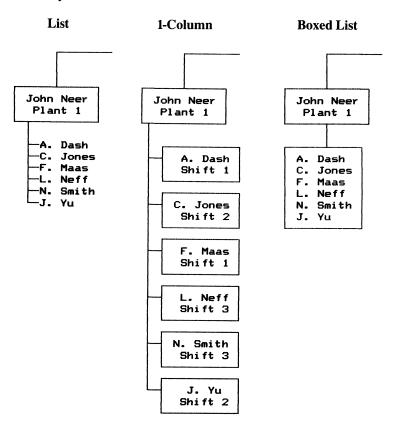
Org Plus normally draws boxes with an unbroken, solid line. Other box styles are available, some of which are shown here. You can choose a box style for the entire chart when you print or you can choose a different box style for individual positions using the Set Option command.



Some printers cannot faithfully reproduce all box styles. Other printers (such as the IBM Quietwriter) print the Shadow and Perspective styles identically.

Chart Style

Org Plus normally arranges boxes horizontally. Other arrangements are available, some of which are shown here. The arrangement of positions in the printed chart is called the chart style.



The list and boxed-list styles print only one line of information for each position. For other styles, you control how many lines of information are printed.

You can choose a chart style for the bottom level of the entire chart when you print. You can also choose a different chart style for a work group using the Set Option command.

Starting a Chart

This section describes how to start a chart from scratch. If you have a one- or two-diskette drive system (rather than a fixed disk), make sure you have a formatted diskette available to save your chart.

Then, follow these steps:

- 1. Select **Work on Chart** from the Main Menu. Org Plus displays a box that represents the topmost position in your organization.
- Type the name of the topmost manager and press Enter ←.
 (This is not the place to type the chart title; that comes later.)

Org Plus now displays a work group. At the top is the name you just typed.

The work group is a manager with his or her direct subordinates underneath. It is the primary building block for constructing an organization chart.

All information in the box at the top of a work group is about the manager. The choice of how much information to enter is entirely your own.

The fields (areas that you type into) labeled Name, Title, and Comment are self-explanatory. However, you can type anything you like in the fields. You can also customize the field labels (see "Printer/Setup" in Chapter 2: Getting Started).

The fields labeled Alt (for Alternate Text) have a variety of uses. Using the Set Option command, they can print in place of the other fields. Using the Special Formats command, they can print in addition to the other fields. (See Chapter 6: Other Commands, for information on both these commands.)

The Alternate Text fields are ideal for birthdates, hiredates, phone numbers, salary grades, social security numbers, and other similar information. If you want to print this information in a chart, first read about the Set Option and Special Formats commands.

The Chart Level field shows a position's level in the Org Plus chart. The top level is 1.

Editing Fields

To edit the topmost manager's name or the information in any other field, use the standard IBM PC editing keys:

- Cursor Left or Cursor Right → to move character by character without erasing.
- Home or End to go to the beginning or the end of a field.
- Backspace ← to back up and erase the previous character.
- Insert [ins] to turn on insert mode for squeezing characters between those already there. (The cursor changes to a small block to let you know that you are in insert mode.) Press [ins] again to turn insert mode off.
- Delete Del to delete characters to the right, one by one.
- Ctrl T to delete the word to the right.
- Ctrl Y to clear the field.

Appendix A: Key Assignments, describes other useful editing keys.

Press Tab \rightarrow to move out of the Name field to the Alternate Text field to the right. The Tab \rightarrow key always moves you from field to field, left to right. If you are in the rightmost field, it moves you to the first field of the next row. Reverse Tab \leftarrow moves you from field to field in the opposite direction.

Use the for keys to move to a field directly above or below your current location in the box.

Fill in as much information about the topmost manager as you want. In the next section you'll learn to add subordinates.

Adding Subordinates to the Work Group

Having entered information about the manager, you now add the subordinates that report directly to him or her. Proceed as follows:

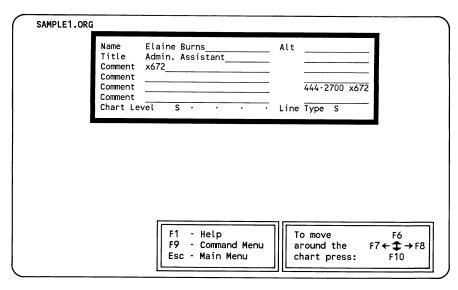
- 1. Press ↓ to move to the lower box, the subordinates' box.
- 2. Type the name of the subordinate you want to appear first on the printed chart and press Enter —. The subordinates' box expands to make room for a second subordinate.
- 3. Enter all the direct subordinates of the topmost manager (up to 96). They will appear on the printed chart in the same order as they appear in the box on the screen. Org Plus displays 12 subordinates at a time. You can page through them using PgUp PgDn or 1 . (Chapter 6: Other Commands, describes automatic sorting of subordinates.)

Notice that Org Plus assumes subordinates are at the next lower level. In other words, their chart level is equal to their manager's level plus one. If the position is at a lower level, you can specify a larger number. For example, in the sample chart on page 1-2, Steve Cox is at level 3. His manager is at level 1. Press Tab — to move to the Chart Level field.

Org Plus also provides for positions at a staff-level location. You place a position in the staff-level location by placing an s in the Chart Level field. A manager can have as many positions in this location as you like. Positions placed in this location have strict limits on subordinates they may have (see Chapter 6: Other Commands). Consequently, a staff-level position is displayed differently on the screen.

The Line Type specifies whether a position connects to its manager with a solid line (S), a dotted line (D), or no line at all (N). Org Plus assumes you want a solid line. You can change the line type by placing the appropriate letter in the line type field. Since the topmost manager has no one above him or her, he or she has no field for a line type.

Chances are some of the subordinates of the topmost manager also have people reporting to them. The next section explains how to add these positions to the chart.



Work group of staff level employee

Additional Work Groups

The work group is a building block. A subordinate in one work group is automatically the manager of a work group at the next lower level. When you display a work group you can add information about the individual in the manager's box (for example, a title). You can also add subordinates.

Follow these steps:

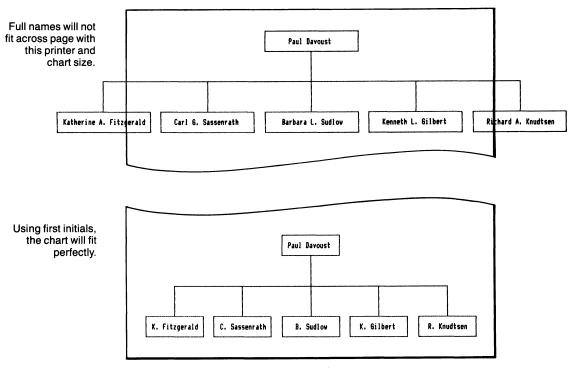
- 1. Select a person to whom you want to add information or subordinates.
- 2. Press ↑ or ↓ to move the cursor to that person's row in the subordinates' box.

3. Press F10 to perform the Down command—Show Lower Work Group.

Org Plus displays a new work group with the individual you chose at the top. Notice that the level for subordinates in the subordinates' box is 3, one level lower than the manager's level. Remember, you can change the level as you add subordinates' names.

4. Add information about the manager then add his or her subordinates.

Note: Your printer can print only so many characters across one page. If you type long names, titles, and comments, then fewer positions can fit across the page.



How you can help make the chart fit

In addition, Org Plus makes every box at a given level the same size. Just one long name, title, or comment can force Org Plus to assign extra space for all boxes at a level.

It is a good idea to limit the length of names, titles, and comments at levels with many positions. (We're not suggesting that you rename people! You can use initials rather than full names and so forth.) How much you limit the length depends on your printer and the complexity of your chart.

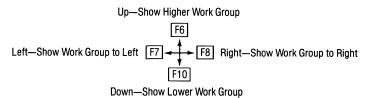
Keep your first chart small until you become familiar with Org Plus.

Moving Between Work Groups

This section describes how you can move around the chart in any direction.

- 1. Press [6] (from anywhere in your current work group) to perform the Up command—Show Higher Work Group. Org Plus displays the topmost manager's work group.
- 2. Move to another person's work group by moving the cursor to that person's row and pressing [F10].

Each work group is like a window through which you see a piece of your organization. You can move that window anywhere. Org Plus has four keys, analogous to the cursor keys in a spreadsheet or a word processor. These keys allow you to move in any direction in your organization chart. So far you have used only the up and down keys, F6 and F10. Here is the whole set of keys for moving around the chart:



[F7] and [F8] allow you to move sideways within a level.

Another set of keys can also be used for moving around the chart: Ctrl - —, Ctrl - —, Ctrl - PgUp, and Ctrl - PgDn. These keys may be easier to use, especially if the function keys are at the top of your keyboard.

Topmost—Show Top Work Group, [Alt] - [F6], displays the work group of the topmost manager. You can use this command from anywhere in your chart.

Take some time to move around your chart. Notice that the keys for moving around do nothing when you reach the extreme top, bottom, left, or right.

Some of the positions in your chart will have no subordinates. Org Plus represents these positions as work groups, too. This makes it easy to add subordinates should you ever need to. When your chart prints, Org Plus ignores a single blank row at the bottom of the subordinates' box or a subordinates' box that is entirely empty. (Blank rows elsewhere in the subordinates' box will print as empty boxes.)

As you move around the chart, positions in the staff-level location are displayed at the same level of the chart as other subordinates.

You may have noticed that F10, Down—Show Lower Work Group, has some helpful characteristics. If your cursor is in a manager's box when you press F10, Org Plus displays the work group of the leftmost subordinate (at the highest level of subordinates). If there are no subordinates, Org Plus displays the leftmost work group of the next lower level.

The Command Menu F9

The Command Menu provides another way to perform commands.

1. Press [F9] from anywhere in your chart. Immediately the pop-up Command Menu appears. On the left you see a list of choices. Each choice represents a group of commands. On the right you see the commands for the highlighted choice.

The command menu is easy to use. First select a choice on the left. Then Org Plus lets you select a command on the right. The single line box always moves to surround the list you can choose from. Press Esc to back up and change your selection.

This User's Guide will identify commands by their group and their name. For example, Tables/Reports [the group]: View Table [the name].

To move directly to any work group in your chart, follow these steps:

- Select Tables/Reports, then View Table. A table with columns for names, titles, and comments appears. It is alphabetized by last name. You can control the columns that appear with the Setup Table command (see Chapter 6: Other Commands).
- 3. Use the ↑ ↓ or PgUp PgDn keys to select the name of the person you want to display. Press Enter ←.

You move directly to that person's work group.

Note: If you have not typed a name into some of your positions, those blank fields will appear at the top of the alphabetized list.

Finish adding any other employees to your chart. Then read the next section to learn how to add a chart title and annotations. **Note:** The fastest way to make a selection is to press the first letter of the choice.

Most choices in the Command Menu can also be started with the proper function key. In fact, you have already used four of the five "Move Around Chart" commands that you see in the menu. You did this when you pressed [F6], [F7], [F8], and [F10] to move around the chart. When learning to use Org Plus, it is a good idea to use the Command Menu for other Org Plus functions.

Print Chart: Titles & Annotations F4

To add a title and annotations to your chart, follow these steps:

- 1. Press [F9] to display the Command Menu.
- 2. Select **Print Chart**, then **Titles & Annotations**. Org Plus displays the Chart Titles form.
- 3. Type a title and subtitle for your chart. Press Enter from the last selection or Att F10 (signifying your choices are complete) from anywhere in the form.
- 4. Org Plus displays the Annotations form. Annotations appear in any of the chart's four corners. Type the desired annotations. Press Enter from the last selection or

 [Alt] F10 from anywhere in the form.

Now you can print your chart.

Print Chart: Print F2

If you did not set up your printer as described in Chapter 2: Getting Started, do so now before proceeding.

Reset your printer if you have been using it with another software product (turn it off, then back on).

Before printing a chart, make sure your printer is connected and on-line. Adjust your paper so the top of the sheet is as close to the printing element as possible. This allows Org Plus to center the chart on the page. Now follow these steps:

- 1. Press [F9] to display the Command Menu.
- 2. Select **Print Chart**, then **Print**. Print prints your entire chart regardless of your current location.

You are asked some questions to make sure that the chart appears as you want it to appear:

1. Org Plus asks you to choose between Manual and Automatic. Manual gives you maximum control over your chart's appearance and prints a chart of any width. Automatic gives Org Plus control over many aspects of your chart's appearance. Automatic also makes the chart fit a size you select (but, it may have to omit positions to do so).

Generally, you should select Manual if your chart has more than 35 positions. You should also select Manual if you have set chart style options. (In automatic, Org Plus tries to pick the best chart styles for your chart. If you have already set chart style options, its hands are tied.)

If you select Automatic, be generous in the page size you choose. Most charts will be 11×14 inches (which is easily reduced to 8.5×11 inches). A large size is especially important if your printer prints only 10 or 12 characters per inch.

To follow the tutorial below, select **Manual**. (Automatic simply omits many of the choices that follow.)

2. Choose the appropriate chart style. The horizontal style results in the widest chart, the list style results in the narrowest. Other styles fall somewhere between. The style chosen controls the arrangement of positions at the bottom of your printed chart. At higher levels Org Plus uses a horizontal style unless you specify another using the Set Option command, described later.

If you used the Set Option command to select a chart style at the bottom of your chart, that style will override the one selected now.

3. After you select a chart style the Chart Format form appears.

The first choice is Make Boxes Equal Height. If you select No, Org Plus prints a field only if it contains something (and if you select the field to be printed as described below). Even if you select No, boxes will be the same height at a given level of the chart.

Normally Org Plus makes boxes at least as wide as those at the next lower level of the chart. Thus, boxes at the top of the chart tend to be larger than boxes at the bottom. Selecting Yes for Make Boxes Equal Width forces all boxes in the chart to have the same width. Selecting Yes tends to make your chart wider.

Using the small type font makes the chart narrower. Narrow line spacing makes the chart shorter. (These options are not available on all printers.)

Next, you can choose to justify the text in the boxes to the left, center (the most common), or right.

Finally, turning on the Squeeze Chart capability can reduce the size of your chart by 10 to 20 percent. Squeezing reduces the space between boxes. This makes the chart more compact at the risk of making it less attractive.

Press Enter from the last selection or Att - F10 (signifying your choices are complete) from anywhere in the form.

If you want even more flexibility in arranging your chart, read about Options and Special Formats in Chapter 6: Other Commands. Options allow you to control the appearance and arrangement of positions or work groups. Special Formats gives you additional formatting choices. See also Appendix B: Chart-Making Tips and Examples.

- 4. Org Plus now asks you to select a box style. Make your choice, then press Enter ←.
- 5. Org Plus displays the Print Control form.

Select **Yes** for those lines of text you want printed in each box. The height of the box adjusts accordingly.

You can also choose to print to a disk file or print multiple copies from this form.

Press Enter from the last selection or Att - F10 from anywhere in the form.

If you have staff-level or columnar-style positions in your chart, Org Plus displays the Special Box Contents form. Select **Yes** for those lines of text you want printed in each box. The height of the box adjusts accordingly.

If you are printing a file to disk or using a plotter, Org Plus will also ask you more questions (see Chapter 6: Other Commands).

Org Plus automatically formats your chart and begins printing. If your chart is too large for one page, it will print on more than one.

Note: Do you have some unexpected empty boxes or positions in your chart? That means you accidentally created some blank fields in a subordinates' box. Except for the bottom field, blank fields print as blank boxes (you may want to do that on purpose). You can remove those empty positions using Delete Position, described in Chapter 6: Other Commands.

Print Chart: Reprint Ctrl - 2

Sometimes you want to reprint your chart with exactly the same print selections you made previously. Reprint saves you time by doing just that. Default print settings will be used if you have not printed the chart before. No warning messages appear when you use Reprint.

Saving a Chart

Org Plus makes it easy to change your chart when your organization changes. To do this, you must first save the chart.

- 1. From your current location in the chart, press Esc. Org Plus returns you to the Main Menu.
- 2. Select **Save Chart** from the Main Menu. Org Plus displays the Save Chart window.
- 3. The Drive (or path) field should display the drive (or path) for saving charts that you specified in "Printer/Setup." If that drive is a diskette drive, make sure it contains a formatted diskette.

If you want the chart saved to a different drive (or path), press Tab \rightarrow to move to the Drive (or path) field. Type in the correct drive (or path). Press Enter \leftarrow .

If the Drive (or path) field is empty, the chart is stored on your default drive.

Note: Path is an advanced DOS concept. Its use is optional.

4. Type the name you want in the Filename field (in DOS format) and press Enter —. Org Plus confirms that your chart has been saved.

If you have previously saved the same chart on the diskette or fixed disk, its name will automatically appear in the Filename field. To replace the chart on the disk with your current one, press Enter . Org Plus asks you to confirm your action when you try to replace another chart on the disk.

Clear You may want to start a new chart after working on another.

- 1. If the Main Menu is already on the screen, proceed to step 2. Otherwise, press Esc to return to the Main Menu.
- 2. Select Clear from the Main Menu.
- 3. If you have worked on your chart without saving it, Org Plus warns you that the chart will be cleared.

Select **Yes** to clear and return to the Main Menu. Org Plus confirms that it has cleared the chart.

Select **No** to return to the Main Menu for another chance to save your existing chart.

Note: To remove a chart from your disk or diskette, use Erase Chart (described below).

Retrieving a Chart

To retrieve a chart from a diskette or fixed disk:

- 1. If the Main Menu is already on the screen, proceed to step 2. Otherwise, press [Esc] to return to the Main Menu.
- 2. Select **Retrieve Chart** from the Main Menu.
- 3. If you have worked on another chart without saving it, Org Plus warns you that the chart will be cleared.

Select **Yes** to clear the chart and display the Retrieve Chart window.

Select No to return to the Main Menu for another chance to save your existing chart.

4. If you want the chart retrieved from a drive (or path) different from the one displayed in the Drive (or path) field, press Tab → to move to the Drive (or path) field. Type in the correct drive (or path). Press Enter ←.

If the Drive (or path) field is empty, the chart will be retrieved from your default drive.

- 5. You can select the name of the chart to retrieve in either of two ways.
 - You can highlight the name using the Cursor keys

 ↑ ↓ → ←. When you have highlighted the name of the chart you want to retrieve, press Enter ←.
 - Or, you can type the name of your chart into the Filename field and press Enter —. Once you start to type a filename, you cannot use the Cursor keys to highlight a name listed below the Filename field.

Org Plus retrieves your chart and displays the topmost position.

Erasing a Chart

To erase a chart from a diskette or fixed disk:

- 1. If the Main Menu is already on the screen, proceed to step 2. Otherwise, press [Esc] to return to the Main Menu.
- 2. Select Erase Chart from the Main Menu.
- 3. If you want the chart erased from a drive (or path) different from the one displayed in the Drive (or path) field, press Tab → to move to the Drive (or path) field. Type in the correct drive (or path). Press Enter ←.

If the Drive (or path) field is empty, the chart will be erased from your default drive.

- 4. You can select the name of the chart to erase in either of two ways.
 - You can highlight the name using the Cursor keys

 ↑ ↓ → ←. When you have highlighted the name of the chart you want to erase, press Enter ←.
 - Or, you can type the name of your chart into the Filename field and press Enter —. Once you start to type a filename, you cannot use the Cursor keys to highlight a name listed below the Filename field.

Org Plus asks you to confirm you want to erase the chart. If you answer yes, it erases your chart.

4

Tables and Reports

Org Plus lets you create simple tables or reports from information in your organization chart. You can use this feature to create salary reports, distribution lists, or telephone directories such as the one shown below.

Allen Manufacturing Telephone Directory July 1987		
Name	Title	Phone
Allen, Monty K		
Banks, Tom	lestern	444-2800 ×307
Cole, R	Shift 3	555-2600 ×331
Cox, Steve		
Hess, R		
noke, Fire		333-2500 x532

The chart SAMPLE1.ORG on the Org Plus diskette has the information for the telephone directory shown above. If you'd like to follow along using this as an example, retrieve SAMPLE1.ORG using the Retrieve Chart command from the Main Menu (see Chapter 3: Building an Organization Chart).

You need several commands to create and print a telephone directory. You select the fields to include in your table or report with Table Setup. To view the table on screen use View Table. You can specify titles and headers for the printed report with Header & Titles, and print the table as a report with the Print Report command. You can access these commands directly with the appropriate function key or by selecting Tables/Reports from the Command Menu.

Tables/Reports: Table Setup ⚠ Shift - F1

A table or report can have up to three columns. The Table Setup form lets you select which field Org Plus should use for each column.

- 1. Select **Table Setup** to display the Table Setup form.
- 2. For each column, you can select a field from any one of the six Text Fields (numbered 1 through 6), the Alternate Text Fields (also 1-6), Amount Fields (A-F), or the Consolidated Amount Fields (A-F). If you select None instead of a field, the column will not print. If you select Lvl, the column will contain the chart level number for each position.

For the sample telephone directory in the chart SAMPLE1.ORG, Org Plus will print the name (Text Field 1) at the left of the page (as the first column). It will print the title (from Text Field 2) in the center, and the telephone number (from Alternate Text Field 5) at the right.

With the Table Setup command you can also specify how Org Plus should order the information in each column—in ascending or descending order. Ascending order is alphabetical from A to Z, or numerical from 0 to 9. Descending order is the reverse direction.

At the bottom of the Table Setup form you can indicate which column to use to do the first sort (the Primary Sort), and which columns to use for the second level sort (the Secondary Sort). Org Plus will use the values in the primary sort column to order your list. Then, if there are identical entries (ties) in your Primary Sort column, those items will be sorted among themselves according to the information in the secondary sort column.

Finally, you can sort last name first (see below for more information on this choice).

Press Alt - F10 when you finish.

i ...

Sorting Last Name First

You can sort by last names regardless of whether you entered the names last names first, first names first, or a mix of each. The names must be in the first text field for Org Plus to do this. Select Yes for Sort Last Name First in the Table Setup form.

The names must be punctuated correctly. Those names you enter last name first must have a comma following the last name (before the first name). In general, you must also include a comma before an abbreviation such as Jr., Sr., MD, or PhD, that follows a name.

Org Plus will recognize multi-word last names such as San Chirico, di Lorenzo, du Bois, and so on. In the unlikely event that Org Plus does not recognize a name, place underscores between each word of the name (Holmes_A_Court) or type them as one word (HolmesACourt). If Org Plus should treat a first name as if it is a last name prefix, add a period or some other character to the end of the first name.

Note: DO NOT select **Yes** for Sort Last Name First if you do not have proper names in the first text field.

Tables/Reports: View Table Att - F5

This command displays the three columns you chose with the Table Setup command. If you have not specified otherwise, you will see the first three text fields—Name, Title and the first Comment line. Each column on the screen is headed by the appropriate field name, except for consolidated amounts which do not have their own field names.

1. Select **View Table** to display the current table.

For the sample chart SAMPLE1.ORG, you will see the names, titles, and telephone numbers, which are contained in the first two text fields and Alternate Text Field 5. The list is sorted in alphabetical order, by last name.

- 2. You can scroll through the list using the ↑ ↓ and PgUp PgDn keys.
- 3. Press Esc to leave the display and continue with other commands.

You can also use the View Table command as a quick way to jump to positions in your chart.

Using the cursor keys, select the name of the position you want to display, and press Enter —. You move directly to that position's work group.

If you have used previous versions of Org Plus, you'll recognize the View Table command as the old Index by Name command, renamed and expanded in function.

Tables/Reports: Header & Titles

Shift
 ■ F4

If you are going to print your table as a report, you can add a report title, a page header, and column titles with the Header & Titles command.

- 1. Select **Header & Titles**.
- 2. You can enter up to three lines as report titles, which will print on the first page of the report.

Each column can also have a title, which will print at the top of the column on each page of the report.

You can also enter a page header, which will print at the top of each page of the report. The header will not print on the first page of the report if you have entered a title for the first page. By specifying the header location you control where the heading prints—at the left, center, or right side of the page.

Press Alt - F10 when you finish.

Tables/Reports: Print Report ☆ Shift - F2

To print your table as a report, use the Print Report command.

The selections for the sample telephone directory include drawing a box around each page, using a dot fill, and skipping lines between letter changes. To print the sample directory, follow the steps below, using the preset selections.

1. Select **Print Report**. Org Plus displays the Report Format form, so you can specify how to format the information in your report.

To draw a box around your report, select **Yes** for Draw Box Around Page. This will enclose your report in a box. If there is not enough room on the page (possible if you are printing at 10 cpi on an 80 column printer), Org Plus will just print lines at the top and bottom of the page.

To fill the spaces between columns with dots, select **Yes** to Fill Lines with Dots... Org Plus will print dots in all the spaces up to the beginning of the last column.

You can also skip a line each time the first letter of the first column changes with Skip Line on Letter Change. Org Plus will print a blank line between the end of the "A" names and the start of the "B" names, and so on throughout the list. The Skip Line on Letter Change setting will be ignored if subtotals or subaverages have been selected. It will also be ignored if the first column is not a text field.

Org Plus will print a page number on each page of your report if you select **Yes** for Print Page Numbers.

With Print Totals and Print Averages, you can choose to print subtotals or subaverages, grand totals or averages, or any combination of them. These apply to the rightmost two numeric columns (containing an amount or a consolidated amount). If all three columns are numeric, the leftmost one will not include totals or averages.

If you choose subtotals or subaverages, they are calculated at the break points based on your sorting sequence. Your primary sort column must be non-numeric (text or level) to use subtotals or subaverages. For example, if you use Level as your primary sort field, you will get a subtotal between each change of level.

The Print Totals and Print Averages settings will be ignored if you do not have Amount or Consolidated Amount Fields selected as columns. Amounts and their functions are discussed in Chapter 5: Managing Numbers.

Note: If an Amount is excluded from calculation (with the Exclude from Amounts option) it will print as zero in your report. An amount that is excluded from printing (with the Suppress Amount Print option) will print as a blank. These commands are discussed under "Set Option" in Chapter 6: Other Commands.

Finally, you can ask Org Plus to Print Counts for your report. This will print sub and/or grand total counts of the lines in your report. You can print counts regardless of whether your columns contain text or amount data. The report count is unaffected by any Do Not Count options set in your chart.

2. When you finish, press Alt - F10. Org Plus then displays the Report Print Control form. From this form you select how Org Plus should print your report.

You can ask Org Plus to print only those positions you have marked by selecting Yes to Print Marked Positions Only. This lets you selectively include in your report only those positions you have marked with the Find & Mark or Assign Mark commands. See Chapter 6: Other Commands for information on marking positions.

If you choose **Yes** to Double Space, Org Plus will double space the entire report. You can also choose to Use Small Type Font or to Use Narrow Line Spacing. Finally, you can have Org Plus print the report to a disk file, and you can select how many copies to print.

3. Press Att - F10 when you are done. Your report will now print.

When Org Plus prints a report, it positions the information on the page so that the left margin is one inch wider than the right margin, if possible. This makes the pages more readable when they are bound at the left edge. 5

Managing Numbers

Org Plus lets you manage numbers as well as textual information. You can enter numerical data related to the individuals or positions. Because Org Plus knows about the structural relationships between positions, you can do calculations that would be difficult or impossible in a spreadsheet. For example, Org Plus can calculate the average salary for a group of subordinates or consolidate the expenses for a branch of your organization.

The amounts features actually provide you with the capabilities of a "mini-spreadsheet" for each position. When you Display Amounts, you see three columns. Two of the columns have predefined functions. The left column contains labels used to name each Amount Field, and the right one is for consolidating the values in the field based on the structure of your chart. You define the middle column. You can enter numeric data directly into amount fields, or set up formulas that calculate a value. While a spreadsheet calculates only by rows and columns, Org Plus also calculates up and down the branches of a tree structure, such as an organization chart.

Formulas, field names, and consolidation methods apply to all positions in your chart—in other words, all your "mini-spreadsheets" are identical in form (though not in content).

There are seven commands you can use to work with amounts. Display Amounts is the command you use to display, enter and modify numeric data. You assign names to amount fields using the Labels command. To define formulas and to specify the types of consolidations to perform, use the Formula Setup command. The Number Format command allows you to specify which fields contain money values (displayed with a money symbol), and which are regular numeric fields. You can also specify how many decimal places to display. Use Print Control to control which Amount and Consolidated Amount Fields (if any) you want to print with the chart. Finally, the Mode of Calculation command lets you specify whether Org Plus should calculate automatically every time you make a change to a number, or only when you request it using the Calculate command.

Amount Commands

Like other Org Plus commands, the amount commands may be invoked directly with the appropriate function key or by selecting **Amounts** from the Command Menu.

Amounts: Display Amounts

Ctrl - F1

Display Amounts expands the manager's box for the current position to show the Amount and Consolidated Amount fields. When amounts are displayed you can enter or edit values in the Amount Fields.

There are six Amount Fields (labeled A through F) and six Consolidated Amount Fields, one associated with each Amount Field.

To Enter An Amount

You enter amounts into the appropriate Amount Field, at the center of the Amount display. You may enter numbers in regular form or in scientific notation (such as 2.6E-5).

If you enter an invalid character, Org Plus will ignore the rest of the entry after the invalid character. For example, if you type t or t5, Org Plus will take the entry as 0. If you type 5t Org Plus will take it as 5.

If a number is too small to be represented (too many zeros after the decimal point and before the number) it will display as zero. If a number is too large to be represented, it will display as asterisks (******).

An Amount Field can contain either a constant or a formula. To specify a formula, use the Formula Setup command discussed below. Once you have specified a formula for a particular field, you will not be able to enter data into that field.

You can also designate any Amount field as a money field, using the Number Format command. This tells Org Plus to include a dollar sign (or other money symbol you have specified) along with the value displayed.

Consolidated Amounts

Each Consolidated Amount Field displays a value computed by consolidating all the values in the Amount Field for the current position and all positions below in the same branch. For example, if the first Amount Field contains salary information, the associated Consolidated Amount shows the consolidation of all the salary information for the position and all its direct and indirect subordinates. You control how the consolidation is done by using the Formula Setup command discussed below. Consolidated Amount Fields cannot be edited.

Amounts: Labels Ctrl - F4

Using the Labels command, you can replace the letter labels (A-F) of the six Amount Fields with a descriptive name. Once you have changed the label to a name, Org Plus will display the name instead of the letter (A-F) when you use the Display Amounts command. It will also print the name if you specify that labels should print along with amounts in your chart (see "Print Control" below).

Amounts: Formula Setup Ctrl - F3

Use the Formula Setup command to enter optional formulas for the Amount Fields, and to specify the consolidation type for each field.

Formulas

You may enter a formula into any Amount Field as an alternative to entering individual values. This is analogous to entering formulas into a spreadsheet.

For example, to have Amount Field C display the difference between the first two fields, you would enter the formula A - B on the formula line for Amount Field C.

The format for Org Plus formulas is much the same as for Lotus 1-2- 3^{TM} . You can use constants, the basic math operators (\times , -, *, /), functions as defined below, and variables representing each of the numeric fields (A, B, C, D, E, F). You cannot use scientific notation to enter a constant into a formula. Org Plus will detect errors such as unbalanced parentheses, illegal symbols (anything other than defined above), and invalid arguments in functions.

When you use formulas, several error conditions can arise. If an operation is invalid, such as dividing by zero, Org Plus will display **ERR**. If it detects a circular argument, (for example, field A is defined as B and field B is defined as A), it will display a **CIRC** message on the screen.

Functions

You can use functions as a component of a formula in Org Plus. These functions include several arithmetic functions, statistical functions, and counting functions.

The counting functions include a classify function which lets you count members of a class you define, such as all positions with a particular job code, or all female employees.

The functions available in Org Plus are:

Counting Functions:

@CNT(rng) Count. Counts the number of positions in range (rng).

@CMP(rng,f) Compare. Counts each position in range (rng) where field (f) is non-zero.

@CLS(rng,tf,"string")

Classify. Counts every position in range (rng) where the contents of text field (tf) match string "string". Field (tf) must be Text field 1-6 or Alternate Text field A1-A6. "String" must be in quotes.

String matching for this function is not case sensitive. The wildcard characters * and ? may be used (see the discussion of wildcard characters under "Find & Mark" in Chapter 6: Other Commands). If you need to search for a quotation mark within the string, precede the quotation mark with a backslash — \".

Arithmetic/Statistical Functions:

- @SUM(rng,f) Gives the sum of values in field (f) within range (rng).
- @AVG(rng,f)Gives the average of values in field (f) within this range (rng).
- @MAX(rng,f) Returns the largest of the values in field (f) within range (rng), or 0 if the range is empty.
- @MIN(rng,f) Returns the smallest value in field (f) within range (rng), or 0 if the range is empty.
- @STD(rng,f)Calculates the standard deviation across range (rng) for field (f). Returns ERR if less than 2 positions in the range.
- @VAR(rng,f) Calculates the variance across range (rng) for field (f). Returns **ERR** if less than 2 positions in the range.

Miscellaneous:

@AMT(rng,f) Returns the amount from field (f) for range (rng), which must be a single position. Rng must be either top or mgr (see below).

The function names, range names, and field letters can be upper or lower case, or mixed. Spaces will be ignored.

Field (f) may be any one of the Amount fields A through F. You must use the letter label for the amount field in a function, not a descriptive field name.

The range (rng) may be one of:

sib Current position's siblings

sub Current position's direct subordinates

lvl All positions at the current level

brn All positions in the current branch

all All positions in the chart

mgr Current position's manager

top Topmost position in the chart

The functions sib, lvl, brn, and all include the current position. The others (sub, mgr, top) do not.

For the following examples, suppose Amount Field A contains the Sales Quota, and Amount Field B contains actual Sales Performance. Some formulas you might use are:

@MIN(sub,B)/@AVG(sub,B)

Gives the ratio of the poorest performer among each manager's subordinates to the group's performance average.

A/@AMT(mgr,A) Gives an individual quota as a

percentage of the departmental quota (as represented by the next higher level's quota).

@MAX(all,B)

Returns the highest Sales Performance amount found anywhere in the organization.

An example of the classify function is:

@CLS(sub,A3,"Sec. II")

Counts every position among each manager's subordinates where the contents of Alternate Text Field 3 match the job title "Sec. II" (Secretary II).

Order of Calculation

Org Plus calculates in column-wise order. It calculates Amounts A through F in order, then Consolidated Amounts A through F. For example, if you have a formula in one field that is used in another formula, you need to make sure that the first one gets calculated before the one that uses its results.

The Consolidation Types

Field.

For each field, you can select one of five methods of consolidation. Until you change them, all six consolidation amount fields are preset to the Sum type.

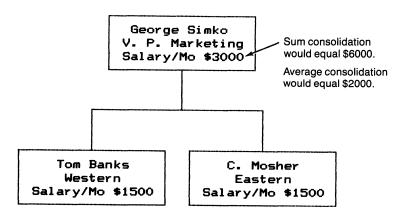
The types are:

None	Do not consolidate this field.
Sum	Totals the amounts from the current position and all positions below in the same branch.
Avg	Computes the average value from the amounts in the current position plus all positions below in the same branch.
Product	Multiplies amounts from the topmost position down through the current position. Use this for yield and probability applications.
Derived	Uses the formula found in its Amount Field, but applies the formula to Consolidated Amount

The most commonly used Consolidation types are Sum, Avg, and None. For the majority of applications these three are sufficient.

Sum and Average Consolidations

The following example illustrates the Sum and Avg consolidation types.



For the three-person work group shown, the Sum consolidation for the Salary field at the manager's level would display \$6000 (the sum of all three salaries). An Average consolidation would display \$2000 (the average of all three salaries).

Consolidation Type None

The None consolidation type is useful when a consolidation of values in the Amount Field does not make sense, or is not needed. For example, if Amount Field A contains a count of all positions in the branch (@CNT(brn)) a consolidation will give a meaningless number, because the lower branches will be consolidated multiple times up the tree structure.

Another example of a meaningless consolidation is for a credit limit. A field containing each individual's credit limit makes sense, but the sum of all credit limits is probably not a useful number.

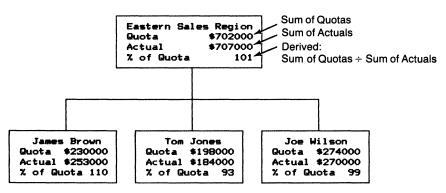
The Product Consolidation

The Product consolidation type is used for specialized applications.

A product consolidation multiplies the values in the appropriate amount field, from the topmost position down through the current position. For example, you might start at the topmost level with a certain number of objects. At each subsequent level, a product consolidation would multiply the number from the previous level by some factor (a success rate, for example) to yield a new number of objects remaining after that level in the process. A typical use for a product consolidation is with fractional amounts to generate a probability or yield factor.

The Derived Consolidation

The example below shows a derived consolidation. The example consolidates sales figures for several salesmen in a sales region. The chart displays consolidated amounts—sums for Quota and Actual sales, and a Derived consolidation for the Percent of Quota. The derived consolidation takes the formula for % of Quota (Actual/Quota times 100) but applies it to the consolidated amounts instead of to the amounts. It divides the consolidated Actual Sales by the consolidated Quota to obtain the percent of Quota for the region. If you used a Sum Consolidation for the regional percentage of quota, Org Plus would add 110+93+99=302—a meaningless number.



Note that in this example, the amount fields for the top level are zero—only the consolidated amounts have meaning in this case.

Note: The consolidation types offer a great deal of flexibility. Which consolidation type you should use depends on the specifics of your application. However, here are some general guidelines.

If you are not using a formula, the correct consolidation type depends entirely on your application.

If you are using a formula to calculate a ratio (e.g. actual/budget), the derived consolidation type will generate the desired result.

If you are using a function in a formula, the range of the function and the type of function jointly determine the appropriate consolidation type. Generally, if the range is *sub*, the sum and average consolidations can be used. Other ranges usually result in mathematically meaningless consolidations, so you should choose consolidation type None.

If data is entered only at the lowest level of your chart, the consolidation type Average does not make mathematical sense. For example, the sales quota of a sales manager is (usually) the sum of his subordinates'. Sales quotas are entered for salespeople only. Therefore, the average quota of the salespeople plus their manager is meaningless.

Amounts:

Number Format Ctrl - F5

The Number Format command lets you format your amount fields. You can specify which fields are money amounts, and which are regular numbers. You can also specify the number of decimal places displayed to the right of the decimal point. When you designate a field as a money field, it is displayed and printed with a monetary symbol (preset to a dollar sign). The money symbol is changeable for different countries, as is the character used as a decimal point. Refer to "Printer/Setup" in Chapter 2: Getting Started, for information on how to change this symbol.

Amounts: Adjust Amount Ctrl - F6

The Adjust Amount command allows you to apply an adjustment amount or factor to all the amounts in a field within a specified range. For example, you might want to give all your subordinates a ten percent salary increase.

- 1. Place the cursor on the field you want to adjust, in the manager's box for the appropriate position. For example, if you want to adjust amounts for all members of a work group, place the cursor on the manager of the work group.
- 2. Select **Adjust Amount**. Org Plus displays the Adjust Amount form.
- 3. Specify the Adjustment Operation—whether you want to add to, subtract from, multiply, or divide the amount. For the salary increase example, you would select **Multiply**.
- 4. Enter the Adjustment Value—a constant amount or a multiplication or division factor. You would enter 1.1 for the salary increase example.
- 5. Org Plus asks you for the range of positions to which the adjustment applies. (See "Selecting Ranges" in Chapter 6: Other Commands). Select the appropriate choice and press Enter —. You would select WrkGrp/Subordinates for the example. Org Plus makes the adjustment.

Amounts: Print Control Ctrl - F2

Use the Print Control command to specify which Amount Fields (if any) should appear in your printed chart. For each field A through F you can prevent the field from printing anywhere in your chart. Or you can choose between the Amount and the Consolidated Amount.

1. Select **Print Control**.

- For each amount field, select No if you do not want the field printed. Select Amount if you want the Amount printed, or select Consol Amnt if you want the consolidated amount to print.
- 3. You may also select whether the field labels will print on your chart. If you select **Yes**, labels will appear with each field you have chosen to print. If you select **No**, no field labels will print. Field labels do not print in reports.
- 4. Finally, you can select whether numbers should be right justified when they are printed. This selection overrides your choice for Justify Text in the Print command.

You can suppress the printing of all amounts for individual positions or ranges of positions in your chart. This is done with the Suppress Amount Print option of the Set Option command. See "Set Option" in Chapter 6: Other Commands.

If you want to print both the amount and the consolidated amount for one field, you must duplicate the amount to a second field, then print the consolidated amount for one of the fields, and the amount for the other. To do this:

- 1. Use the Formula Setup command to establish a formula in a second field that references the first field. For example, if the amount in question is in Amount Field A, simply type A as the formula for Amount Field B.
- 2. In Print Control, select Consol Amnt for field A, and Amount for field B.

Amounts: Mode of Calculation

Alt - 6

The Mode of Calculation command lets you control whether Org Plus does amount calculations automatically, or only when you request it. Selecting Automatic means that all Amount and Consolidated Amount Fields will be recalculated each time you enter or modify data. This is the preset mode, and is similar to automatic recalculation in a spreadsheet. Calculations are always done column-wise, calculating amounts A through F in order, then consolidated amounts A through F.

Manual calculation mode means that amount calculations will only occur when you request them using the Calculate command (see below).

The Manual calculation mode is recommended if you intend to work with large charts. As the amount of data in your chart grows, calculations will take increasingly more time. Specifying Manual will speed up Org Plus because it will not have to recalculate after every change. A CALC message will appear if you have made a change that requires a calculation.

Amounts: Calculate Alt - 1

Use the Calculate command when Org Plus is set to Manual calculation mode, and you want it to recalculate your Amount and Consolidated Amount Fields.

Other Commands

This chapter describes additional functions that allow you to maximize the value of Org Plus.

You can use all commands directly by pressing the appropriate function key, or by selecting the command from the Command Menu (obtained by pressing [F9]).

Selecting Ranges

For many of the commands in this chapter, Org Plus lets you act upon a range of positions. Depending on the command, these ranges may include:

Position (Current) — the position containing the cursor when you invoked the command.

Siblings — all positions that report directly to the same manager as the current position (including the current position).

WrkGrp/Subordinates — all positions that report to the current position (not including the current position).

Level — all positions at the same chart level as the current position (including the current position).

Branch — the current position and all positions below, reporting directly or through subordinate managers.

All Positions — all positions in the chart.

Marked Positions — all positions currently marked by the Find & Mark or Assign Mark command. This range includes the current position only if it is marked.

Edit Chart

The Edit chart commands let you change or move information and positions in your chart.

Edit Chart: Insert Position [F3]

Insert Position inserts a new level into the chart or inserts a new subordinate position in the subordinates' box.

To insert a new level of management into the chart:

- 1. Place the cursor anywhere in the manager's box of the individual that will report to the new position.
- Select Insert Position. An empty manager's box appears.
 Everyone reporting through the new manager moves down one level.

You can also insert a new position in the subordinates' box:

- 1. Place the cursor anywhere in the row in which you want the new subordinate.
- 2. Select **Insert Position**. The row the cursor is on and those below will move down one line.

Edit Chart: Move Position [Alt] - [F3]

Move Position allows you to pick up a position or branch and move it somewhere else within a chart.

To move a position or branch:

- 1. Place the cursor on the position you want to move. (If you want to exchange two adjacent positions, place the cursor on the lower one.)
- Select Move Position. Org Plus displays an asterisk by the name of the position to be moved.

- 3. Go to the location in the chart where the position should now appear. (You can do other things along the way; Org Plus remembers the position you want to move.) Place the cursor on the appropriate row in the subordinates' box under the position's new manager.
- 4. Select **Move Position** once again. Org Plus asks you to confirm the move. Assuming you have not changed your mind, select **Yes**.

Depending on several conditions, Org Plus may need to ask more questions.

If the position you are moving has subordinates, and you have placed the cursor in the subordinate area of another work group, Org Plus asks if you want to move the individual position or the branch. Select **Position** if you want the subordinates left behind, reporting to an "Open" position.

Edit Chart: Delete Position Alt - F4

Delete Position lets you delete a single position or an entire branch of a chart.

When you delete a position, the box disappears from the printed organization chart. If you are simply replacing one employee with a new one, type over the former employee's name. There is no need to delete the position.

To eliminate a position or branch, follow these steps:

- 1. Place the cursor on the position to be eliminated.
- 2. Select **Delete Position**. Org Plus asks you to confirm that you want to delete the position. Select **Yes** if that is still your intention.

3. If the position being deleted has subordinates reporting to it, Org Plus asks if you want to delete the position or the branch. If you select Position, all subordinates will report to the next higher manager. If you select Branch, the entire branch is deleted.

Note: There can be only one topmost position in each chart. For that reason the topmost position can be deleted only if it has exactly one direct subordinate.

If you want to delete the entire chart, select **Clear** from the Main Menu.

Edit Chart: Copy Information

Ctrl - F9

The Copy Information command gives you a quick way to copy information to other positions in your chart. You may copy a single field, all fields, just the text fields or just the amount fields.

Org Plus also provides a clipboard, which can temporarily hold information while you decide where to put it.

Using the Clipboard gives you the most flexibility in copying information. In some cases it is the only way you can make a copy.

To copy information using the Clipboard:

- 1. Place the cursor in the manager's box of the position that contains the information you want to copy. If you want to copy a single field, place the cursor in that field.
- 2. Select Copy Information. Org Plus asks you what information you want to copy.
- 3. Select the fields to copy and press Enter .

- 4. Org Plus asks you to select the range you want the information copied to. Select **Clipboard** and press Enter ←.
- 5. Now move the cursor to the manager's box of the appropriate position. For example, if you want to copy the information to all members of a work group, place the cursor on the manager of the work group. (You can do other things along the way; the information will stay in the Clipboard until you replace it.)
- 6. Select **Copy Information** again. Org Plus asks you what information you want to copy.
- 7. Select **Clipboard** and press Enter ←.
- 8. Org Plus asks you to select the range you want the information copies to. Make the appropriate selection and press Enter ←.

The information stays in the Clipboard until you replace it. You can copy from the Clipboard any number of times.

You can also copy to a single position by first marking the destination position (using the Assign Mark command), and then copying to the marked position.

Note: If you select a single field to copy, all other fields will be left untouched by the Copy Information command. If you copy a group of fields, any fields that are blank or zero in the group you select are cleared in the destination position. In fact, you can clear a range of fields by copying a blank field or a zero value over them. This will not clear an amount field that contains a formula—use the Formula Setup command to do that.

You can copy information without using the Clipboard if the position you want to copy from also defines the range you want to copy to. For example, if you want to copy from a position to all positions in the branch below, you can do so without the Clipboard. To copy without using the Clipboard:

- 1. Place the cursor in the manager's box of the appropriate position. If you want to copy a single field, place the cursor in that field.
- 2. Select Copy Information. Org Plus asks you what information you want to copy.
- 3. Make the appropriate selection and press Enter \leftarrow .
- 4. Org Plus asks you to select the range you want the information copied to. Again, make the appropriate selection and press Enter \leftarrow .

Edit Chart: View Clipboard Ctrl - F10

The View Clipboard command lets you see the contents of the Clipboard.

Every field you copy to the Clipboard is marked with a dot at the far right. For example, if you copy all text fields to the Clipboard, they will all be marked with a dot, even if they are blank. All fields that display a dot will be copied when you copy from the Clipboard to positions in your chart.

Edit Chart: Sort Subordinates

⚠ Shift - F3

The Sort Subordinates command allows you to rearrange the subordinates of a manager. You can use this command to alphabetize your subordinates as a matter of protocol, or rank them according to quota or budget performance. You can sort one work group or the entire chart.

You specify the sorting order with the Table Setup command (see "Table Setup" in Chapter 4: Tables and Reports). Until you change it, the sort is preset for alphabetical order, last name first, on the first text field (Name field).

To sort subordinates:

- 1. Place the cursor in the manager's box of the manager of the work group you want to sort. (The cursor can be in any manager's box if you want to sort the entire chart.)
- 2. Select **Sort Subordinates**. Org Plus will ask you if you want to sort the entire chart, or just the work group. Make the appropriate selection.

When you sort subordinates, the layout of your chart may be changed.

For example, if you have arranged your chart so that the chart looks balanced, sorting the entire chart could undo your ordering. Therefore, use caution before you decide to sort your chart.

Note: Hidden positions are sorted along with the other positions at the same level. If they are blank, they will be placed first in an ascending alphabetical sort.

Marking Positions

Org Plus provides several commands that let you "mark" positions. A mark is simply an electronic tag that does not print. This allows you to target the action of certain other Org Plus commands. These commands are Copy Information, Print Report, Set Option, Clear Option and Adjust Amount.

For example, you could use Find & Mark to mark all product managers. Then use Adjust Amount to give them all a raise.

You can mark positions explicitly with the Assign Mark command, or let Org Plus mark ones that match criteria you choose using the Find & Mark command. You can also Unmark Positions, and Review Marked positions.

A marked position displays a plus sign in the lower right corner of the manager's box.

Edit Chart:

Find & Mark Shift - F7

The Find & Mark command lets you search for and identify all positions that meet criteria you specify. For example, you might want to find all employees with a particular title or who have salaries within a certain range.

When you select Find & Mark, you first indicate the field where Org Plus should look for values that match the search value you will specify. Then you tell Org Plus what relationship must exist between the value in the field and your search value. For example, should they be equal, or should one be less than the other? Finally, you give Org Plus a value to use as the search value. You can combine the results of multiple searches—for example, to find all individuals with a certain title *and* whose salary is within a certain range.

To search on a field value:

- Select Find & Mark. Find and Mark Page 1 is displayed. Select the field you want to search. You can select any one of the Text Fields, the Alternate Text Fields, the Amount Fields or the Consolidated Amount Fields. Press Enter ← and Page 2 will be displayed.
- 2. Indicate whether you want to Mark All Occurrences that are equal to (=), greater than (>), less than (<), greater than or equal to (>=), less than or equal to (<=), or not equal (/=) to the value you enter as the search value on the next line of the form.
- 3. Now enter a value for Search Value. This is the text string or amount that you want Org Plus to search for.

The value you enter may include "wild card" symbols. If you use an asterisk, Org Plus will match all characters from the asterisk to the next explicit character or to the end of the value. For example, JO* would match JOE, JOHN, JOSEPH, and JOANNE but not JAMES. *ER* will match any word that has an ER anywhere in the word.

You can use a question mark to match any single character. For example, JO?N would match JOHN and JOAN but not JOANNE. If you want to search for the characters * or ?, precede them with a backslash — * or \?.

4. If you are searching a text field, Org Plus asks if you want to distinguish between capital and lower case letters. Select Yes to Match Case if you want Org Plus to match the case of your value exactly. For example, if you select Yes, then Org Plus considers e, E, and ë to be different. If you select No then e, E and ë are equivalent.

5. Finally, you must tell Org Plus what to do with marks from previous searches. If you want to clear the results of previous searches, select **Erase**. This will erase all previous marks, and mark only those cases found to match the current search criteria.

Select Intersect to mark those cases found by this search AND already marked by previous searches (logical AND). For example, to find all Product managers with salaries greater than \$10,000 a year, first search for Product Managers, with Previous Mark set to Erase. Then search for Salaries > \$10,000, with Previous Mark set to Intersect. Org Plus will erase any previous marks not also found in the current search. (If no cases are found that match both searches, no items will be marked.)

Select **Overlap** to mark all cases found by this search in addition to those found by the previous search (logical OR). For example, to find all individuals with titles of either Product Manager or Project Manager, first search for Product Managers with Previous Mark set to Erase. Then search for Project Managers with Previous Mark set to Overlap.

When Org Plus finishes the search, it displays a table of the positions that match the search criteria. This table is presented in the same form as View Table. The entries in the table are sorted according to the settings made with the Table Setup command.

If no entries are found that match your criteria, you will see a message to that effect.

Once the table is displayed you have several choices. You can examine the table using 1 and PgUp PgDn. Press Enter to go to the work group highlighted in the table, or press Esc to clear the table and erase your search criteria. To return to Find & Mark to perform additional searches, press Att - F10.

Edit Chart:

Assign Mark Ashift - F6

The Assign Mark command lets you mark positions directly.

- 1. Place the cursor in the manager's box of the appropriate position. For example, if you want to mark all members of a work group, place the cursor on the manager of the work group.
- 2. Select **Assign Mark**. Then select the range to mark and press Enter ←.

Edit Chart: Unmark Positions

♦ Shift - F8

You can erase marks for individual positions or for ranges of positions.

- 1. Place the cursor in the manager's box of the appropriate position. For example, if you want to unmark all members of a work group, place the cursor on the manager of the work group.
- 2. Select **Unmark Positions**. Then select the range to unmark and press Enter ←.

Edit Chart:

Review Marked Shift - F5

The Review Marked command displays a table of marked positions. This table is presented in the same form as View Table. The entries in the table will be sorted according to the settings made with the Table Setup command.

You can examine the table using \(\bar{\phi} \) or \(\bar{\phi} \bar{\phi} \bar{\phi} \bar{\phi} \). Press Enter \(\bar{\phi} \) to go to the work group highlighted in the table, or press \(\bar{\text{Esc}} \) to clear the table.

Chart Commands

The Chart commands give you an overview of your chart as a whole.

Chart: Preview Chart F5

Preview Chart lets you see a map of your chart. This option is useful for locating your current work group relative to the rest of the organization.

Each regular position appears as a small square. Each staff position appears as a dash and hidden positions appear as a small circle. The current position blinks on and off. If you have a large chart, some of the individual positions may overlap.

You can leave the map by pressing any key.

Note: Some chart style options limit the number of subordinate levels. If you exceed those limits, some positions will not be mapped.

Chart: **View Chart Status**

View Chart Status gives you information about your chart such as:

Alt - F1

- Options that are set
- Number of chart levels
- Number of positions in chart
- Memory available

To clear any of these options, use the Clear Option command discussed below.

Options

Org Plus has several commands that affect the appearance, format, or amount operations of positions in your chart. You can set and clear options with the Set Option and Clear Option commands. Check to see what options are set for an individual position with the View Options command.

You can also create and modify auxiliary lines with the Draw Auxiliary Line and Modify/Delete Line commands. Auxiliary lines are lines you can use to connect a position to another position in addition to its direct manager.

You can check to see if options are set anywhere in your chart using the View Chart Status command.

Choices you make using the Set Option command override any choices you make with the Print command. For example, you can use Set Option to select different box styles for any number of individuals in your chart. Then when you print the chart you can select yet another box style for everyone else.

Options: Set Option Alt - F7

Use Set Option to select the following:

Chart Style

You can select a chart style for any work group in your chart. (For a definition of chart style see Chapter 3: Building An Organization Chart.)

Org Plus displays the initials of the work group chart style you select in the upper-right corner of the subordinates' box.

You can control both the height and width of your chart by your selection of chart style. For example, if a 1-column style work group is too tall, try a 2-column style. It is half the height and only slightly wider. See Appendix B: Chart-Making Tips and Examples for diagrams of complex styles you can make with options.

Note: Some limitations apply to list, boxed-list, and columnar styles. The subordinates of employees in a columnar-style work group must have list or boxed-list, or 1-column styles. If you specify this incorrectly, Org Plus corrects it for you.

Additionally, you should use list, boxed-list, and columnar style work groups only at the lowest level and next to the lowest level of a branch. If you specify these styles more than two levels up, levels below the second will not be printed for that branch.

Box Style

You can control the box style for positions in your chart.

Alternate Text Field Print

You can ask Org Plus to print the contents of the Alternate Text Fields instead of the Text Fields for positions in your chart. This will replace all the Text Fields with Alternate Text Fields for the positions specified. The first Alternate Text Field label will be highlighted if this option is set.

You can also specify the printing of Alternate Text Fields in addition to Text Fields with the Special Formats command discussed below.

Plotter Pens

If you print to a plotter, you can select a pen to use for the box contents of positions in your chart.

Exclude From Amount

You can choose to have all amounts for positions in your chart excluded from all calculations and consolidations (except counts, which are handled separately).

Do Not Count

You can exclude positions in your chart from all amount field counts (see Chapter 5: Managing Numbers) and print-time counts (see below). This option does not affect report counts.

Suppress Amount Print

Finally, you can suppress printing all Amount Fields for positions in your chart. This overrides the amount print settings you have specified with the Amount Print Control command.

To set an option:

- 1. Place the cursor in the manager's box of the appropriate position. For example, if you want to set an option for all members of a work group, place the cursor on the manager of the work group.
- 2. Select **Set Option**. Org Plus identifies the options available.
- 3. Choose the option you want to set, then press Enter —.
- 4. Org Plus presents you with additional forms or menus, depending on your selection.
- 5. Once you have selected or confirmed an option, select the range to which this option should be copied, and press Enter ←.

Options: Clear Option Alt - F8

The Clear Option command lets you clear options you have set with the Set Option command.

To clear an option:

- Place the cursor in the manager's box of the appropriate position. For example, if you want to clear an option for all members of a work group, place the cursor on the manager of the work group.
- 2. Select Clear Option. Then select the option you want to clear and press Enter ←.
- 3. Select the range for which you want this option cleared and press Enter .

Options: View Options Alt - F9

View Options lets you see what options you have set for an individual position.

- 1. Place the cursor in the manager's box of the position for which you want to see option settings.
- 2. Select **View Options**. Org Plus displays the option settings for the current position.

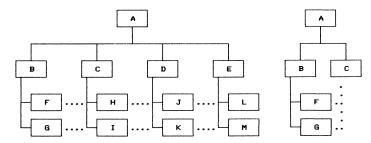
Options: Draw Auxiliary Line

Ctrl - F7

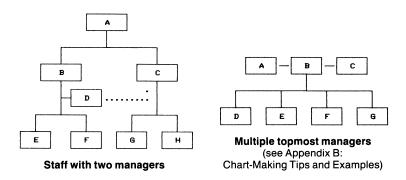
Auxiliary lines are additional lines between positions in your chart. You might use auxiliary lines if you have a staff level employee who reports to two managers or if you have a matrix management structure.

Note: An organization chart is already crowded with lines and boxes. Room for auxiliary lines is sparse. Therefore, we do not recommend the casual use of auxiliary lines. To maximize your chance for acceptable results, limit the number of auxiliary lines in your chart. DO use auxiliary lines as shown under "Appropriate Uses of Auxiliary Lines" below. DO NOT use auxiliary lines as shown in "Awkward Uses of Auxiliary Lines."

Appropriate uses of Auxiliary Lines



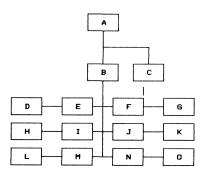
Matrix organizational structures



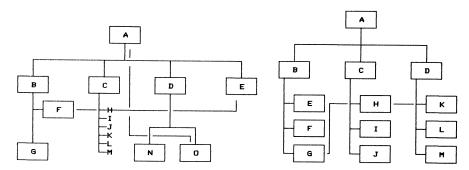
When you print your chart, the auxiliary line will be drawn underneath any other lines or boxes it must cross to make the required connection. When planning your chart, place positions to be connected as close to each other as possible to minimize line crossings. Org Plus will draw auxiliary lines anywhere you specify, but lines that span multiple columns or down multiple levels may result in an unattractive or confusing chart.

Note: If you are using auxiliary lines, be cautious if you decide to Sort Subordinates. A change in the order of positions could result in auxiliary lines that are awkwardly placed.

Awkward uses of Auxiliary Lines



Auxiliary line to inside position of a 4-column style work group (from C to I)



Auxiliary lines that cross multiple columns and levels

To draw an auxiliary line:

- 1. Place the cursor in the manager's box of one of the positions you want to connect.
- 2. Select **Draw Auxiliary Line**. Org Plus will display a form indicating that an auxiliary line will be drawn to the position you selected.
- 3. Select the line type you want to use for the auxiliary line—Solid or Dotted. If you are using a plotter, select the pen you want to use to draw this line. Press [Alt] [F10].

- 4. Now move the cursor to the manager's box for the position you want to connect to the other end of the auxiliary line.
- 5. Select **Draw Auxiliary Line**. Org Plus will ask you to confirm the line between the two positions you have selected. Select **Yes** if these are the two positions you intended to connect, or **No** if they are not.

When you have connected an auxiliary line, you will see an additional mark that appears at the right outside corner of the manager's box.

Options: Modify/Delete Line

Ctrl - F8

The Modify/Delete Line command lets you change or remove the auxiliary lines you have set up. It will display in turn each auxiliary line connected to a given position. You can also change the line type and pen setting.

To modify or delete an auxiliary line:

- 1. Place the cursor in the manager's box of the position for which you want to delete or modify an auxiliary line.
- 2. Select **Modify/Delete Line**. Org Plus will display the first auxiliary line. You can change the line type or plotter pen assignment. Then press Att F10.
- 3. Org Plus will ask you to confirm or delete the line. If you do not want to delete the line, select **Yes** to leave this line alone. If you want to delete the line, select **No**. Org Plus then displays the next auxiliary line, if one exists. Press to stop the display of any remaining auxiliary lines.

Advanced Printing

The following section presents Org Plus features and commands for refining the look of your printed chart. It also covers printing parts of your chart, printing to a disk file, and printing through the Sideways program.

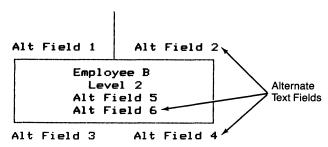
Print Chart: Special Formats

☐ Shift - F10

The Special Formats command provides additional flexibility in formatting your chart.

You can choose to print Alternate Text Field 5 or Alternate Text Field 6 at the bottom inside each box.

You can choose to print Alternate Text Fields 1 through 4, one outside each corner of every box.



Overlap Printing of Pages lets you print a large chart that will be taped together. The overlap makes the pages easy to assemble.

For chart style usage, select **Bottom of All Branches** if you want the style you choose when you print to control the arrangement of boxes at the bottom of any branch in your chart. Select **Lowest Level Only** if you want the style you choose to control the arrangement at the lowest level only. Generally, selecting Bottom of All Branches makes your chart narrower.

Print-Time Codes

There are four codes you can include in a text field that will create special effects when you print.

Lines in Boxes

You can place a line ——— in a box in place of any line of text. Just type @ as the first character of the field.

You can type information after the @, but it is ignored when the chart is printed.

Depending on the box style, the chart style, and the type of employee, the line will either join the sides of the box or be one space removed.

To force a space between the line and the sides of the box, type @@ in the first two spaces of the field.

Count of Subordinates

By placing a # (number sign) as the first character in a text field, Org Plus prints a count of the positions in the branch. The position with the # is included in this count. If the Do Not Count option is set for a position in the branch, that position is not counted. Any text typed after the # will be ignored.

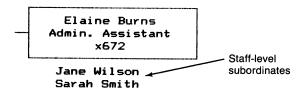
Suppress Printing of an Individual Field

You can suppress the printing of a single field for a single position by placing a 1 (closed square bracket symbol) as the first character of the text field.

Subordinates for a Staff-Level Position

Org Plus does not allow a staff-level position to have subordinates in the regular sense. However, you can have Org Plus format a staff-level box so it has a list of subordinates printed below the box. Bring the staff-level position into the manager's box at the top of the screen. Type the subordinates' names into any of the text fields, or into Alternate Text Fields 5 or 6. Type a > (greater than symbol) as the first character of all the text fields containing subordinate names. These fields will be left justified below the box in a list, as shown below.

All text fields following the first > will be printed below the box (including Amount Fields). However, they won't be left justified unless you include the > as the first character in the field. You can also use the > code in Alternate Text Fields 5 and 6.



Hidden Positions

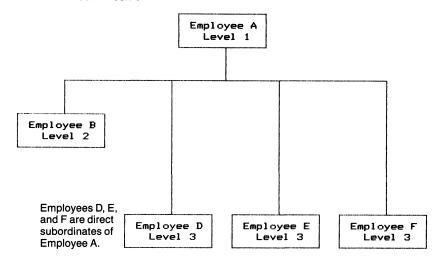
Hidden positions do not show when your chart is printed. If a hidden position has subordinates, a line will print from the hidden position's manager straight through to the hidden position's subordinates. No box is drawn. No information you enter about the hidden position is printed, either in your chart or in reports. They are not counted in counts, and don't participate in amounts. You cannot copy information to them, mark them, or set options for them.

When you copy, the non-hidden subordinates of a hidden position are treated as direct subordinates of the hidden position's manager.

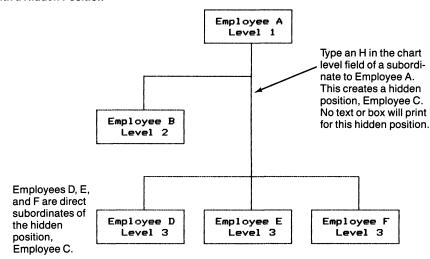
You create a hidden position by placing an h in the Chart Level field.

You can use hidden positions to hold notes about your employees or the chart itself. They also provide a choice of appearance when printing charts with employees removed more than one level from their manager.

Without a Hidden Position



With a Hidden Position



Print Chart: Print Part Alt - F2

Printing a part of a chart is the same as printing the whole chart except that you specify the area of the chart to be printed.

- 1. Place the cursor in the manager's box of the position you want to be at the top of the printed chart.
- 2. Select **Print Part**. Org Plus confirms the position at the top of the chart and asks you how many levels you want to print. If you want to print to the bottom of the chart, select **All** levels.

From this point on, printing a part of a chart is the same as printing the entire chart (see Chapter 3: Building An Organization Chart).

Print Chart: Reprint Part Alt - 2

Reprint Part lets you reprint the part of your chart you last printed with the Print Part command, without having to confirm all the print settings. You must place the cursor in the manager's box of the position you want to be at the top of the printed chart.

Plotters

If you set up Org Plus for use with a plotter, you must select pens for drawing various pieces of your chart. You do this before the chart is plotted.

If you request more pens than your plotter has, Org Plus stops and requests that you change pens as required. The Set Option command allows additional control of plotter output for individual positions in your chart.

If you have a large format plotter (one that prints on paper larger than 11" by 17"), see the README program for special instructions.

Print to Disk

You can print an entire chart, part of a chart, or a report to a disk file. You might do this to copy your chart or report into your favorite word processing program (if it accepts standard ASCII), or to print using the Sideways™ program.

Note: The file you print to your disk cannot be read back into Org Plus. If you want to save your chart for future modifications using Org Plus, you must save the chart using the Save Chart command described in Chapter 3: Building An Organization Chart. The file you print to your disk is a picture of your organization chart that can be understood by your printer or by the Sideways program, but cannot be modified by Org Plus.

Be sure to give different names to the file printed to disk and to the saved chart. Org Plus will not allow you to print to disk over your saved chart.

To print a chart to a disk file:

- Select one of the Print commands (Print or Print Part).
 Several steps through the print sequence, on the Print Control form, select **Disk** as the choice for the Print To setting.
 If you are printing a report, select **Yes** for Print to Disk File.
- 2. After you have completed the Print Control form, a menu gives you a choice of formats for your disk file. Select Sideways Version 2 or Sideways Version 3 if you plan to print your chart using the Sideways™ program from Funk Software, Inc. If you plan to print the file to a printer using the DOS COPY command, select Printer.

If you want the chart to be written as a standard ASCII file, select **Printer/Setup** from the Main Menu (described in Chapter 2: Getting Started) and choose a printer named Other, before you store the file to disk. (Most named printer types include control codes for the printer along with the text on the disk.) Then select **Printer** for this step.

If you are printing a report rather than a chart, your choice of formats will be Printer (the same as above), ASCII, or ASCII with Graphics.

- 3. Org Plus will ask you to provide a file name. It will then format the chart and write it to the file you specified.
- 4. Make sure you save your chart as described in Chapter 3: Building An Organization Chart, before you exit Org Plus.

To print the disk file using DOS, use the DOS COPY command:

copy/b file-specification device-name

Use the COPY command instead of the DOS PRINT command because some graphics characters in the file might cause the PRINT command to behave incorrectly.

Sideways™

Sideways is a program from Funk Software, Inc., that allows many dot matrix printers to print sideways on the paper. Thus, wide output (like some organization charts) can print in one pass without requiring manual assembly of the pages. To print your chart using Sideways:

- 1. Print to disk by selecting **Disk** as the Print To selection on the Print Control form.
- Select Sideways Version 2 or Sideways Version 3 when Org Plus asks you to choose a format for your disk file. Your choice depends on which version of Sideways you have. (If you have Version 2.11 you should choose version 2, and so forth.)
- 3. Make sure you save your chart as described in Chapter 3: Building An Organization Chart, before you exit Org Plus.

4. Type Sideways to start the Sideways program, and make sure you have configured it for the printer you plan to use.

Note: You cannot use the Lotus 1-2-3[™] version of Sideways (SW123) or the version that comes with SuperProject[®] from Computer Associates. Those versions print only Lotus or SuperCalc[®] files, and won't recognize an Org Plus file.

- 5. Make sure you enter the name of the Org Plus file you printed to disk, NOT the saved Org Plus chart.
- 6. It is important that you set Glue Lines on the Sideways menu to match what Sideways indicates is the number of lines per page. (The number of lines per page varies, depending on your printer and the font you choose.) If the number of Glue Lines is not set correctly, gaps will appear in the chart when it is printed.

Note: If you have a tall chart (top person to bottom person), Sideways may print the chart in more than one section (a top half and a bottom half). Here, set Glue Lines to twice the number of lines per page (3 times if the chart prints in 3 sections).

Sideways disk files can be read by many word processors. You can use your word processor to make enhancements and changes not possible within Org Plus, then print the chart using Sideways.

Print to Screen

You can display your chart on screen to see what it will look like before you print it.

Select Print or Print Part, then select **Screen** as the Print To setting on the Print Control form.

Once your chart is displayed, you can move around to view different areas of the chart using the cursor keys or the PgUp or PgDn keys. These scroll the display one screen-full at a time.

Using Ctrl - PgUp, Ctrl - PgDn, Ctrl - and Ctrl - you can scroll the display one line or column at a time.

Home or Alt - F6 will display the topmost position in the chart, and End will display the lower right corner of the chart. (This corner may be blank if the right-most positions do not have subordinates down to the lowest levels of the chart.)

Indicators at the bottom of the screen tell you how many pages are needed to print from the bottom of the visible portion of your chart (the bottom of the screen) to the top of the chart, and from the right-most visible column to the left edge of the chart. By going to the bottom right of the chart you can tell how many pages Org Plus will need to print the entire chart.

If you want to print the chart after you have viewed it on screen, press Alt - F10 and the chart will print on your printer. To return to Org Plus to make more changes, press Esc.

File Commands

The File commands let you combine charts, save parts of your charts, or exchange information with certain other software packages.

File: Append Chart

Alt - 3

Org Plus lets you attach a chart stored on your disk to the chart you are currently working on. This is called appending a chart.

To append another chart:

- 1. Place the cursor in a subordinates' box where you want the topmost manager of the chart you are appending to appear.
- 2. Select **Append Chart**. Org Plus displays a window that asks you to identify the name of the chart you want to append.
- 3. Select a chart (as described in "Retrieving a Chart") and Org Plus appends it.

File: Save Branch



Save Branch saves to a disk file any part of the organization chart you are currently working on. The piece you save can be worked on as a separate chart, or it can be appended to another chart.

To save a branch of a chart:

- 1. Place the cursor on the manager's box of the position you want at the top of your saved chart. Every work group below and reporting through this position will be saved.
- 2. Select **Save Branch**. Org Plus displays a window in which you must choose a name for your chart. Choose or type a name, then press Enter —.
- 3. Org Plus saves the branch of your chart you specified.

Note: Using Save Branch from the position of the topmost manager is equivalent to selecting Save Chart from the Main Menu.

File: Exchange Data



See the Org Plus README program for the latest instructions on exchanging information with other programs. Chapter 1: Introduction to Org Plus gives instructions for using the README program.

Appendix A Key Assignments

Editing Text in a Field

- Cursor Left and Cursor Right to move character by character without erasing.
- Backspace ← to back up and erase the previous character.
- Home and End to move to the beginning or the end of the field.
- Ins to turn on insert mode for squeezing characters between those already there. (The cursor changes to a small block to let you know that you are in insert mode.) Press Ins again to turn insert mode off.
- Del to delete characters to the right, one by one.
- Caps Lock and Num Lock work in the normal fashion.
- Ctrl T to delete the word to the right of the cursor.
- Ctrl Y to clear or delete the line. If the line has information in it, pressing Ctrl Y once clears the line. In the manager's box, pressing Ctrl Y a second time deletes the line.
- Ctrl A to move to the previous word.
- Ctrl F to move to the next word.
- Ctrl N to insert a blank line in the manager's box at the line the cursor is on. The lines following are moved down one line.

Selecting Menu Items

- Spacebar moves one position.
- Home and End move to the first or last selection that you can currently see on the screen.
- If the selections overflow the window (this can happen when saving and retrieving charts or when using View Table or Review Marked), [Ctrl] [Home] and [Ctrl] [End] move to the first or last selection in the list.
- PgUp and PgDn move one page at a time in View Table or Review Marked.

Moving Between Fields

For moving between fields in a work group or a form:

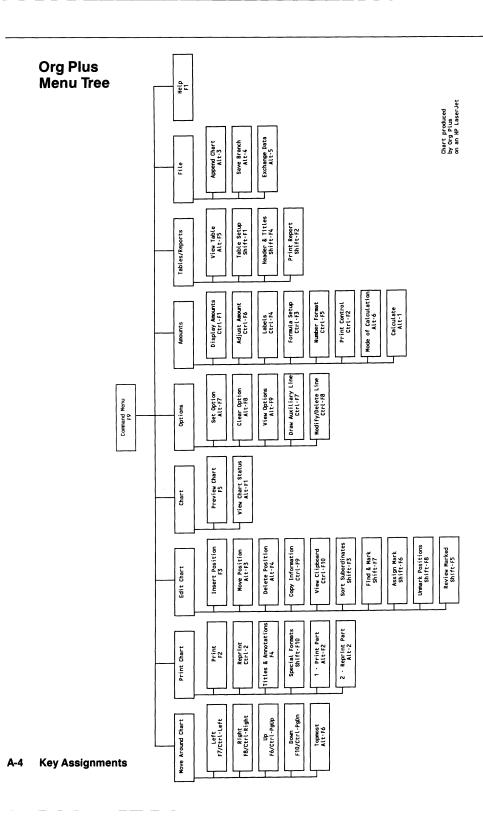
- Tab → moves one field to the right until at the rightmost field: then it moves down and to the leftmost field.
- Reverse Tab moves one field to the left until at the leftmost field; then it moves up and to the rightmost field.
- Cursor Up ↑ and Cursor Down ↓ move to the field immediately above or below the current field.
- Ctrl Home and Ctrl End move to the extremes of the current box and, if pressed again, move to the next box above or below on the screen if there is one.
- Enter → moves down and to the left. Exceptions: Enter → adds additional fields when at the bottom row of a work group. When you press Enter → while in the bottom row of a form you signify that you have completed work on the form.

Note: All keys for moving among data entry fields, except Enter —, wrap from the top to the bottom of the screen and vice versa.

Using WordStar® Commands

Org Plus supports many of the WordStar keyboard editing commands for those who are familiar with them. The WordStar commands Org Plus supports are:

- Ctrl S for cursor left ←
 - Ctrl D for cursor right →
 - Ctrl E for cursor up 1
 - Ctrl X for cursor down 1
- Ctrl H for backspace ←
- Ctrl V for insert character Ins
 - Ctrl G for delete character Del
- Ctrl | for tab |
- Ctrl M for Enter ←
- Ctrl T to delete word to right
 - Ctrl A move to previous word
 - Ctrl F move to next word
 - Ctrl N to insert line
 - Ctrl Y to clear/delete line (not identical to WordStar command see above)



Appendix B

Chart-Making Tips and Examples

Making Your Chart Narrower

Here are some ways to make your chart narrower, whether you select Manual or Automatic when you print:

- Use first or last name initials instead of writing the full name.
- If you have one extremely long name, abbreviate it.

 Org Plus makes all boxes at a level large enough to hold the longest name and makes boxes at higher levels at least that wide. There are four dots at the bottom of each manager's box to help judge text length. The dots line up with the 10th, 15th, 20th, and 25th characters of the Text Fields.
- Put names and titles on two lines instead of one. This makes boxes (and your chart) narrower but taller.
- If you are printing amounts and they are the widest lines in your boxes, make the labels shorter or print without labels.
- Beware of placing a solitary position at the lowest level of your chart. Since the narrowest chart styles are available for the lowest two levels only, you do not want to use up one of the levels for a position that can be moved up a level or omitted.
- If you are printing Alternate Text Fields 1-4 on the outside corners of the box, make sure one of those fields does not include a lengthy item. The box will be more than twice as wide as the longest corner text.
- Print your chart in pieces, one department or group at a time. This often makes your charts more legible as well. You can make an overview chart with department names or other information appropriate to your chart. (Often the overview information can be placed in the Alternate Text Fields and printed using the Alternate Text Field Print option.)

These tips apply when you follow the Manual print path.

- Select Yes for Use Small Type Font if it is available on your printer.
- Use a chart style that makes your chart narrower. Try stagger instead of horizontal style if you need to squeeze just a little. Try list, boxed-list, or 1-column styles if you need to squeeze a lot. Of course, this makes your chart taller.

A very pleasing, narrow chart arrangement is shown in Example 1 below.

- Select Width or Both for Squeeze Chart. This will eliminate white space between boxes.
- Select No for Make Boxes Equal Width.

Making Your Chart Shorter

Here are some ways to make your chart shorter, whether you select Manual or Automatic when you print:

- Use fewer lines of chart titles and annotations.
- Make sure names and position titles are on one line instead of two. Don't print any lines of text or amounts that aren't necessary. In particular, printing Alternate Text Fields 1-4 on the corners will increase the height of every box by two lines.
- If you are printing amount fields that are not necessary for one or more levels of your chart, turn them off with the Suppress Amount Print option. (It is important that this be done for an entire level in order to make your chart shorter.)
- If you are using a plotter or a laser printer, print in portrait orientation.
- Print your chart in pieces, one department or group at a time. This often makes your charts more legible as well. You can make an overview chart with department names or other information appropriate to your chart. (Often the overview information can be placed in the Alternate Text Fields and printed using the Alternate Text Field Print option.)

These tips apply when you follow the Manual print path.

- Select Yes for Use Narrow Line Spacing if it is available on your printer.
- Use flatter chart styles such as horizontal or 4-column. This makes your chart wider as well as shorter. Even better, use the List or Boxed List chart styles. They are extremely compact.
- Select **Height** or **Both** for Squeeze Chart. This will eliminate some space between levels.
- Select No for Make Boxes Equal Height.

Trading Off Between Chart Width and Height

If you choose a style such as 1-column, one work group might be much taller than the others. Use Options to make that one work group 2- or 4-column style. This makes your chart much shorter, with a small increase in width.

On the other hand, you might choose 4-column style because most of your work groups are large. If one work group is smaller, use Options to make it a 1-column style. This makes your chart narrower without making it too much taller.

Staff with Subordinates

Org Plus doesn't permit positions at the staff-level location to have subordinate positions. The term staff-level refers to a special location on the printed organization chart. Many organizations like to place secretaries and administrative assistants in this special location.

Note: Some organizations distinguish between line and staff *functions*. That is not the meaning used in this guide. Often, staff functions, such as a legal department, have many subordinates. They should not be placed at a staff-level locaton.

If you have a staff-level position that has a small number of subordinates, you can accomplish the desired effect in one of two ways:

- Put the name and title of the staff manager in the top lines of the box. Subordinates can be listed underneath. Use the Print-Time code for staff-level subordinates (>) to print the subordinates names below the box. (See "Subordinates for a Staff-Level Position" under "Print-Time Codes" in Chapter 6: Other Commands.)
- Put the name and title of the staff manager in the top lines of the box. Subordinates can be listed underneath. Distinguish the two types of employees by indenting the subordinates or by placing an @ in the first space of the field separating them. This causes Org Plus to draw a line between them. (See "Lines in Boxes" under "Print-Time Codes" in Chapter 6: Other Commands.)

BIG Boxes

At the bottom of your chart you can have boxes up to 96 lines tall. Type the contents for these big boxes into the Name fields *only* (in the subordinates' box) below the manager for the box. Then select the boxed-list chart style.

You can also specify a line type of None and use Set Option to change the box type to None. Then the big box will look like a large paragraph. These large boxes are ideal for job descriptions.

Two or More Topmost Managers

Org Plus allows only one topmost manager in a chart. Of course, you can always put more than one name in the topmost box and separate the names with a line. Or, try this:

- 1. Put your chart title (or no information at all) in the position at Chart Level 1.
- 2. Use Set Option to select a box style of **None** for the position at Chart Level 1.
- 3. Enter the real-world topmost managers as subordinates of the position at Chart Level 1. Type N into their Line Type fields.
- 4. Draw auxiliary lines between the topmost managers.

See the examples under "Draw Auxiliary Line" in Chapter 6: Other Commands.

Two or More Managers for One Department

You can use auxiliary lines to create a department with more than one manager.

- Enter all the department managers as subordinates of one manager (the department managers' manager). Make sure they are next to one another at their level. Set the Line Type of the manager closest to the center in the group to S. Set the Line Type of the others to N.
- 2. Enter department employees as subordinates of the manager closest to the center (the one connected to his or her manager with a solid line).
- 3. Draw auxiliary lines to connect the other department managers to the center manager. (See "Draw Auxiliary Line" in Chapter 6: Other Commands.)

Example 4 at the end of this Appendix illustrates a chart with multiple mangers for one department.

Employees with More Than One Manager

Org Plus allows only one direct manager per position, but there are four possible solutions:

- Place the employee as a subordinate of one manager. Then connect him or her to the other manager(s) with auxiliary lines. (See "Draw Auxiliary Line" in Chapter 6: Other Commands.)
- Place the employee in the chart more than once. List him or her as a subordinate under each manager for whom he or she works.
- Place the employee under one manager on the chart. Tell the full story in an annotation. You can specify annotations such as this using the Titles & Annotations command.
- Put a note in the employee's box on the chart.

Advisory Level Positions

If you need to place a position off to the side but at the same level as another position, you can accomplish it with the following steps.

- 1. Enter both the manager and the advisory position as subordinates of one manager.
- 2. Type N into the Line Type field of the advisory position.
- 3. Draw an auxiliary line between the manager and the advisory position.

Example 5 at the end of this Appendix illustrates a chart with an advisory position at the topmost level.

If the advisory position is at the topmost level of the chart, place both the manager and the advisory position at chart level two, reporting to an invisible level one position. See steps 1 and 2 of "Two or More Managers for One Department" above.

What to Put in Text Field 1

Many organizations place the title of a position above the name in the box. In Org Plus, you can type the position's title in Text Field 1 to accomplish this. However, if many positions have the same title, this method becomes confusing when you are editing your chart.

Try placing the name in Text Field 1 and duplicating it in the appropriate field below. When you print, turn off printing of Text Field 1 so the name only appears once on your chart. This makes it easier to identify the positions in the subordinates' box. It also allows you to sort positions last name first for a table or report, or when sorting subordinates in work groups. Sorting last name first only works on the contents of Text Field 1.

Underlining Names and Other Fields

Use the lines in boxes capability described in "Lines in Boxes" under "Print-Time Codes" in Chapter 6: Other Commands.

Alternate Text Fields

There are several creative ways to use the Alternate Text Fields:

- When printing two versions of a chart (overview and detail), the Alternate Text Fields can be used to hold the shorter, overview text.
 - One trick to make a good overview chart is to place the most important information in the Alternate Text Fields, rather than short versions of what is in the full-length fields. For example, if the name is the most important information to appear on your chart, you might want to put the first name in the top Alternate Text Field and the last name in the second and so on.
- You can use the Alternate Text Fields to store birth dates, hire dates, phone numbers, mail stops, or other information for reference. You can print this information in addition to your text fields with the Special Formats command described in "Special Formats" in Chapter 6: Other Commands.

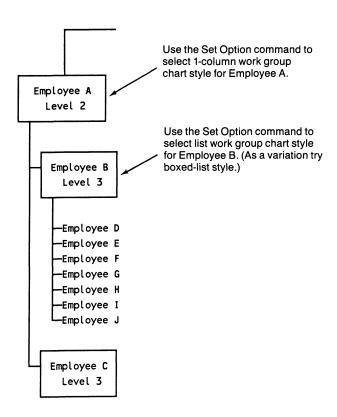
More Than Two Levels of List or Columnar Chart Style

Org Plus allows only two levels of a list, boxed-list or 1-column chart style. These must be at the bottom two levels of a branch. However, you can simulate more levels by indenting entries in a list or boxed-list style work group.

Examples

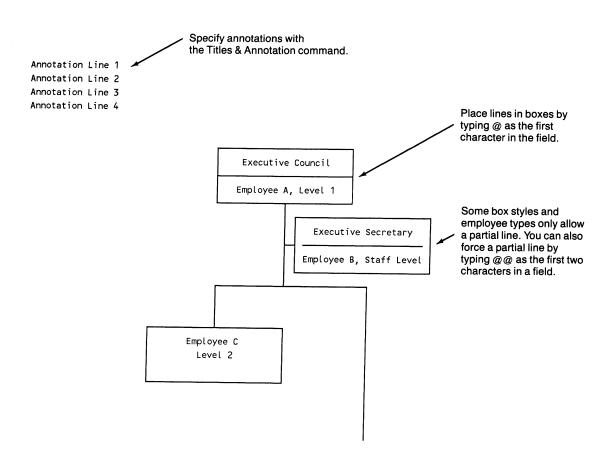
Here are some examples of what you can do with Org Plus.

Narrow Chart Styles



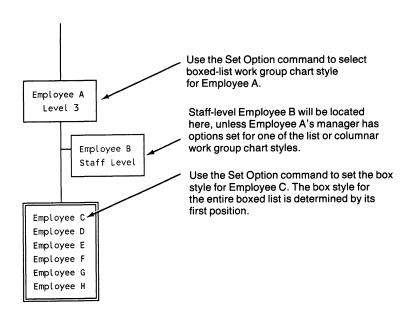
Example 1

Using Annotations and Lines in Boxes



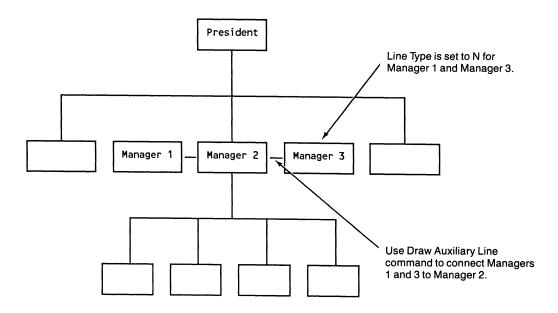
Example 2

Using Boxed List



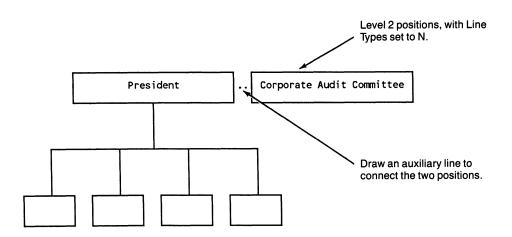
Example 3

Three Managers for One Department



Example 4





Example 5

Appendix C Memory Utilization and Other Org Plus Limits

the amount of available memory in your computer.

Other programs can affect the memory available to
Org Plus. Programs that stay hidden until you want them
(memory-resident programs) reduce the amount of memory
available. Calculators that pop-up and print spoolers fall
into this category. Org Plus may hold fewer positions if

■ The maximum number of positions in a chart depends on

load these programs that stay hidden, Org Plus may be able to handle more positions.

You can check the number of positions available using the

these hidden programs are resident in memory. If you don't

- A maximum of 96 subordinates can report directly to one manager.
- A chart can have only one position at the topmost level. See Appendix B: Chart-Making Tips and Examples for ideas on making a chart with more than one topmost manager.
- A chart can have a maximum of 99 levels.

Chart Status command.

■ See the README program for the most up-to-date information on Org Plus memory utilization and limits. (Chapter 1: Introduction to Org Plus contains instructions for the README program.)

Index

A	manual calculation, 5-14
adding subordinates to the work group, 3-10	order of calculation, 5-8
additional work groups, 3-11	printing, 5-13
add position to a chart	in reports, 4-6
see Insert Position	uses of, 5-1
see also adding subordinates	see also consolidated amounts
Adjust Amount (Ctrl-F6), 5-12	AMT (amount function), 5-6
Adjustment Operation, 5-12	AND (logical), 6-10
Adjustment Value, 5-12	annotations, 3-16
	Annotations form, 3-16
administrative assistants	Append Chart (Alt-3), 6-29
see staff level employees	ascending sort, 4-2
advanced printing, 6-19	ASCII
advisory level positions, B-6, B-13	file, 6-25, 6-26
All, 5-7	see also Exchange Data
all positions	Assign Mark (Shift-F6), 6-11
as range for commands, 6-1	asterisk
as range in functions, 5-7	see box style
Alternate Text fields, 3-8, B-7	asterisks in field, 5-3
copying, 6-4	asynchronous communications ports, 2-7
entering, 3-8	attach chart
printing	***************************************
in addition to text fields	see Append Chart
see Special Formats	Auto Cut-Sheet Feeder, 2-6
in place of text fields	Automatic
see Set Option	see Mode of Calculation
tips on using, B-1, B-2, B-7	see also printing
Alternate Text Field Print	auxiliary lines
see Set Option	appropriate uses of, 6-17
Amount commands, 5-2	awkward uses of, 6-18
see also Menu Tree	defined, 6-16
amount fields	how to change, 6-19
definition, 5-2	how to draw, 6-19
labels for, 5-4	how to remove, 6-19 line type for, 6-18, 6-19
Amount Print Control, 5-13	plotter pen for, 6-18, 6-19
amounts	with Sort Subordinates, 6-17
adjustments to, 5-12	
automatic calculation, 5-14	average consolidation type, 5-8, 5-9
consolidation types, 5-8	AVG
error conditions, 5-3, 5-4	average consolidation type, 5-8
formulas in, 5-4	average function, 5-6
how to enter, 5-3	

В	chart
backing out, 3-2	annotations, 3-16
batch printing	format, specifying, 3-18
see README	levels, 3-5, 3-10, 6-1, 6-12
baud rate	subtitle, 3-16
see Printer/Setup	title, 3-16
BIG boxes, B-4	Chart commands, 6-12
blank rows, 3-14	see also Menu Tree
see also empty boxes	Chart Format form, 3-18
board of directors	Make Boxes Equal Height, 3-18
see advisory level position	Make Boxes Equal Width, 3-18
boss	Narrow Line Spacing, 3-18
	Small Type Font, 3-18
See topmost manager	Justify Text, 3-18
Bottom of All Branches, 6-20	Squeeze Chart, 3-18
box	chart level
around report page, 4-5	definition, 3-5
manager's, 3-3	Chart Level field, 3-9, 3-10
subordinates', 3-3	for hidden position, 6-22
boxed-list	for staff-level position, 3-5
see chart style	chart-making tips and examples, B-1
boxes	charts
empty, 3-14, 3-20	adding subordinates, 3-10
height, 3-18, 3-19	building, 3-1
lines in, 6-21, B-10	clearing, 3-21
lines of text in, 3-19	erasing, 3-23
size, 3-13, 3-18, 3-19	example, 1-2, B-9
width, 3-12, 3-18	height, 6-13, B-2, B-3
box style	introduction, 1-1
definition, 3-6	making narrower, 3-12, 3-18, 6-20, B-1
for boxed-list, B-11	making shorter, 3-19, 3-18, 6-13, B-2
selecting, 3-19, 6-14	moving around, 3-4, 3-15
see also Set Option	printing, 3-17
branch	retrieving, 3-22
as range for commands, 6-1	saving, 3-20
as range in functions, 5-7 definition, 3-6	size, 3-18
Brn, 5-7	squeezing, 3-18
	starting, 3-8
broken	terms, 3-2
see box style	tips and examples, B-1
building an organization chart, 3-1	trading off between width and height, B-3
_	width, 3-18, 6-13, 3-12, B-1, B-3
\mathbf{C}	work group, 3-2
CALC, 5-14	chart style
Calculate (Alt-1), 5-14	definition, 3-7
capacity	limits, 6-12, 6-14
see limits	selecting, 3-18, 6-13
characters per inch, 2-4	see also Set Option
characters per men, 2-7	Chart Title form, 3-16
	Choices Complete (Alt-F10), 3-16

choices, making, 3-1	consolidated amounts
CIRC, 5-4	definition, 5-3
circular reference, 5-4	order of calculation, 5-8
classify function, 5-5	printing, 5-13
example, 5-7	types, 5-8
Clear, 3-21	consolidation types
see also Main Menu	avg, 5-8, 5-9, 5-11
clearing	derived, 5-8, 5-10, 5-11
a chart, 3-21	hints on using, 5-11
a field, 3-9, A-1	none, 5-8, 5-9, 5-11
options, 6-16	product, 5-8, 5-10
a range of fields, 6-5	sum, 5-8, 5-9, 5-11
Clear Option (Alt-F8), 6-16	continuous forms, using, 2-6
clipboard, 6-4	Copy Information (Ctrl-F9), 6-4
copying to, 6-4	copying text or amount fields
copying from, 6-5	see Copy Information
viewing contents, 6-6	copying the Org Plus diskette, 2-1
CLS (classify function), 5-5	corners, text on, 6-20
CMP (compare function), 5-5	count lines in report, 4-6
CNT (count function), 5-5	count of subordinates, 6-21
column headings	count (positions)
see Header & Titles	print count in text field, 6-21
columnar-style, 3-19, 6-14, B-3	use in formula, 5-5
see also chart style	counting functions
•	see functions
columns in table or report, 4-2	cpi, 2-4, 2-5, 4-5
column titles, 4-4	current position, 6-1
COM1, COM2, 2-7	cursor keys, 3-1, 3-9, A-1, A-2
combining charts	cut-sheet feeder, 2-6
see Append Chart	cut-sheet feeder, 2-0
Command Menu (F9), 3-15	_
Amounts, 5-2	D
Chart, 6-12	data bits
Edit Chart, 6-2	see Printer/Setup
File, 6-29	Delete Position (Alt-F4), 6-3
Help (F1), 3-2	deleting characters, 3-9, A-1, A-3
Move Around Chart, 3-13	Decimal Places
Options, 6-13 Print Chart, 3-17	see Number Format
Tables/Reports, 4-1	decimal point symbol, 2-8
see also Menu Tree	demote employee
Commands, 3-1	see Move Position
Command Menu (F9), 3-15	derived consolidation type, 5-8, 5-10
keys to select, A-4	descending sort, 4-2
list of, A-4	DIF
Menu Tree, A-4	see Exchange Data
Comment field, 3-8	diskette, copying Org Plus, 2-1
comment length, 3-12, B-1	diskette drive, 1-4
configuring your system	
see Printer/Setup	Disk Operating System (DOS), 1-4
see I Inner/setup	Display Amounts (Ctrl-F1), 5-2

display chart status	exiting a form
see View Chart Status	see backing out
display clipboard contents	see also Choices Complete
see View Clipboard	exiting Org Plus, 2-8
display marked positions	export data
see Review Marked	see Exchange Data
display table	extra lines
see View Table	see auxiliary lines
dollar sign, 5-12	,
Do Not Count	F
see Set Option	-
dotted line report	field labels
see auxiliary lines	for amounts, 5-4
see also line type	for text, changing, 2-8
double	fields
see box style	Alt, 3-8
Down — Show Lower Work Group (F10), 3-13	alternate text, 3-8 amount, 5-1, 5-2, 5-3
Draw Auxiliary Line (Ctrl-F7), 6-16	Chart Level, 3-9, 3-5, 6-22
Draw Box Around Page	Comment, 3-8
see Report Format form	consolidated amount, 5-2, 5-3
drive (or path), 2-7, 3-20, 3-22, 3-23	copying, 6-4
(== panse), = 1, = 20, = 22, = 25	editing, 3-9
E	Filename, 3-21, 3-22, 3-23
	Line Type, 3-10, B-5, B-6
Edit Chart commands, 6-2	moving between, 3-9, A-2
see also Menu Tree	Name, 3-8,
editing fields, 3-9	suppress printing of, 6-21
keys, A-1, A-3	Title, 3-8
editing text in a field, A-1	File commands, 6-29
employees with more than one manager, B-6	see also Menu Tree
empty boxes, 3-14, 3-20	Filename field, 3-21, 3-22, 3-23
equipment, 1-4	Fill Lines With Dots
Erase Chart, 3-23	see Report Format form
see also Main Menu	Find & Mark (Shift-F7), 6-8
erase marks, 6-10	erase marks, 6-10
erasing a chart, 3-23	intersecting marks, 6-10
ERR, 5-4, 5-6	multiple searches, 6-8, 6-10
error conditions (amounts), 5-3, 5-4	overlapping marks, 6-10
essential terms, 3-2	search criteria, 6-10
evaluation order	search value, 6-9
see order of calculation	finding positions
examples	see Find & Mark
chart-making tips and, B-1	see also View Table
organization chart, 1-2, B-9	fire employee
Exchange Data (Alt-5), 6-30	see Delete Position
Exclude from Amount	fixed-disk system, 2-2
see Set Ontion	starting, 2-3

font	Header & Titles (Shift-F4), 4-4
see Use Small Type Font	Header Location, 4-4
footnote	height of chart, 6-13, B-2, B-3
see annotations	Help (F1), 3-2
format for numbers	hidden positions, 6-22
see Number Format	sorting, 6-7
format, specifying chart, 3-18	uses of, 6-23
formulas (in amounts) 5-4	hide amounts
Formula Setup (Ctrl-F3), 5-4	see Suppress Amount Print
function keys, 3-1	hide text
see also Menu Tree	see print-time codes
functions, 5-5	hiring employees
arithmetic/statistical, 5-6	see Insert Position
counting, 5-5	see also adding subordinates
order of calculation, 5-8	horizontal
ranges of, 5-7	see chart style
@AMT (return amount), 5-6	see chart style
@AVG (average), 5-6	
@CLS (classify), 5-5	I
@CMP (compare), 5-5	IBM PC, 1-4
@CNT (count), 5-5	import data
@MAX (maximum), 5-6	see Exchange Data
@MIN (minimum), 5-6	Index by Name
@STD (standard deviation), 5-6	see View Table
@SUM (sum), 5-6	insert characters, 3-9, A-1, A-3
@VAR (variance) 5-6	Insert Position (F3), 6-2
	installing Org Plus on a fixed disk, 2-2
G	intersect
	see Find & Mark
getting a chart	introduction to Org Plus, 1-1
see retrieving a chart	introduction to Org 1 lus, 1-1
getting help, 3-2	T
getting started, 2-1	J
glue lines	job description
see Sideways	see BIG boxes
group	Justify
see work group	Text
	see Chart Format form
H	Amounts
headings	see Amount Print Control
for columns in tables	
see Header & Titles	K
in charts	key assignments, A-1
see Titles & Annotations	key ussignments, 111
in reports	
see Header & Titles	
header	
see Header & Titles	
see also Titles & Annotations	

L	\mathbf{M}
Labels (Ctrl-F4), 5-4	Main Menu, 2-3, 3-8
labels	see also menu items
changing (text fields), 2-8	Make Boxes Equal Height, 3-18
for amounts, 5-1, 5-4	Make Boxes Equal Width, 3-18
for text fields, 3-8	making choices, 3-1
printing (amounts), 5-13	making chart narrower, B-1
landscape orientation, 2-6, 2-4	making chart shorter, B-2
last name sort, 4-3	_
lay-off employee	manager as range in function, 5-7
see Delete Position	more than one per employee, B-6
Left — Show Work Group to Left (F7), 3-13	two or more for one department, B-5
length of chart	two or more topmost, B-5
see height of chart	see also topmost manager
length of name, title, comment, 3-12, 3-13, B-1	see also work group
length of paper setting, 2-6	manager's box
letter quality printer, 2-5	definition, 3-3
level	Managing Numbers, 5-1
as column in table/report, 4-2	Manual
as range for command, 6-1	see Mode of Calculation
as range in function, 5-7	see also printing
levels	map of chart
chart, 3-5, 3-10, 6-12	see Preview Chart
limits, C-1	margin, top, 2-6
staff, 3-5, 3-10	Mark All Occurrences, 6-9
see also additional work groups	marked positions
limits, C-1	as range for commands, 6-1
lines in boxes, 6-21, B-10	displaying, 6-11
line spacing	Marking Positions, 6-8
narrow	see also Assign Mark
see Chart Format form	see also Find & Mark
see also Report Print Control form	Match Case, 6-9
double	MAX (maximum function), 5-6
see Report Print Control form	memory
line type	requirements, 1-4
definition, 3-10	utilization, C-1
Line Type field, 3-10, B-5, B-6	see also View Chart Status
list	menu items
see chart style	Clear, 3-21
Lowest Level Only, 6-20	Erase Chart, 3-23
LPT1, 2-5	Printer/Setup, 2-3
Lvl	Quit, 2-8
column in table/report, 4-2	Retrieve Chart, 3-22
range in function, 5-7	Save Chart, 3-20
	Work on Chart, 3-8
	Menu Tree, A-4
	Mgr, 5-7
	MIN (minimum function), 5-6

Mode of Calculation (Alt-6), 5-14	\mathbf{O}
Modify/Delete Line (Ctrl-F8), 6-19	one-diskette drive system, 2-1, 3-8
money field	starting, 2-2
see Number Format	Open position, 6-3
money symbol	operating system
see Number Format	see Disk Operating System
more than two level of list or columnar	Options commands, 6-13
chart style, B-8	how to set, 6-15
Move Around Chart commands, 3-13	see also Menu Tree
see also Menu Tree	OR (logical), 6-10
Move Position (Alt-F3), 6-2	order of calculation, 5-8
moving	organization chart
around chart, 3-4	
between fields, 3-9, A-2	examples, 1-2, B-9 Org Plus
between work groups, 3-13	building charts, 3-1
moving information	introduction, 1-1
between fields	limits, C-1
see Copy Information	Menu Tree, A-4
between Org Plus and other programs	starting, 2-1
see Exchange Data	Other Commands, 6-1
multiple managers	outside of box, text on, 6-20
see topmost manager	overlap
see also chart-making tips and examples	marks
	see Find & Mark
N	printed pages
Name field, 3-8	see Special Formats
	Overlap Printing of Pages, 6-20
name length, 3-12, B-1	overview of chart
narrow line spacing in chart	see Preview Chart
see Chart Format form	see also View Chart Status
in report	
see Report Print Control form	P
new hires	
see Insert Position	page header
see also adding subordinates	for report see Header & Titles
no box	for chart
see box style	see Titles & Annotations
none consolidation type, 5-8, 5-9	paper length
notes	setting, 2-6
see annotations	paper width
Number Format (Ctrl-F5), 5-12	setting, 2-6
rumber Format (Ctri 13), 3 12	parallel printer port
	see LPT1
	parity
	see Printer/Setup
	See I IIII Setup

path, 2-/, 3-20, 3-22, 3-23	batch
PC-XT	see README
installing Org Plus, 2-2	branch of chart, 6-24
perspective	charts, 3-17
see box style	consolidated amounts, 5-13
phone book, 4-1	labels for amounts, 5-13
Plotter Control form, 2-7	manual, 3-17, B-1, B-2, B-3
plotter pen	part of chart, 6-24
see Set Option	reports, 4-5
plotters, 2-7, 1-4, 6-24	subaverages in reports, 4-5
pen selection, 6-14, 6-24, 6-18, 6-19	subtotals in reports, 4-5
portrait orientation, 2-6, 2-4	suppress for individual fields, 6-21
position	tables, 4-5
advisory level, B-6	to a disk file, 6-25
current, 6-1	to screen, 6-28
hidden, 6-22	totals in reports, 4-6
Open, 6-3	unattended
staff level, 3-5, 3-10	see README
see also starting a chart	with Sideways, 6-25
Preview Chart (F5), 6-12	see also chart-making tips and examples,
Previous Mark, 6-10	Print Marked Positions Only
Primary Sort, 4-2	see Report Print Control
Print Averages	Print Page Numbers
see Report Format	see Report Format
Print (chart) (F2), 3-17	Print Part (Alt-F2), 6-24
	Print Report (Shift-F2), 4-5
Print Chart commands, 3-17, 6-20,6-24 see also Menu Tree	margins, 4-7
	Report Format form, 4-5
Print Control (amounts) (Ctrl-F2), 5-13	Report Print Control form, 4-7
Print Control form, 3-19, 6-25, 6-26	print-time codes, 6-21
Print Counts	count of subordinates, 6-21
see Report Format	lines in boxes, 6-21, B-10 subordinates for staff level
printers, 2-4, 1-4	
IBM Graphics, 2-4,	position, 6-22, B-3 suppress printing individual field, 6-21
letter quality, 2-5	
Okidata, 2-4	print to disk, 6-25, 3-19 for use with DOS COPY, 6-26
resetting, 3-17	for use with Sideways, 6-25
Printer/Setup, 2-3	writing an ASCII file, 6-25
see also Main Menu	print to screen, 6-28
printing Alternate Text Fields 1 through 4, 6, 20	Print Totals
Alternate Text Fields 1 through 4, 6-20	see Report Format
Alternate Text Fields 5 and 6, 6-20	
amounts, 5-13 automatic, 3-17, B-1, B-2	product consolidation type, 5-8, 5-10
automatic, 3-17, B-1, B-2 averages in reports, 4-6	promote employee
averages in reports, 4-0	see Move Position

Q	retrieving a chart, 3-22
Quit, 2-8	Review Marked (Shift-F5), 6-11
see also Main Menu	Right — Show Work Group to Right (F8), 3-13
quitting Org Plus, 2-8	Right Justify
	see Amount Print Control
R	see also Chart Format form
ranges	~
in commands, 6-1	S
in functions, 5-7	Save Branch (Alt-4), 6-29
README, 1-4, 2-5, 6-30, C-1	Save Chart, 3-20
reduce work force	see also Main Menu
see Delete Position	Save Printer/Setup, 2-7
reducing chart size, 3-12, 3-18, B-1, B-2	saving
removed reports	a chart, 3-20
see Chart Level field	part of a chart, 6-29
see also hidden positions	see also Printer/Setup
remove employee	search criteria
see Delete Position	see Find & Mark
remove marks	search for positions
see Unmark Positions	see Find & Mark
reorganize chart	Search Value
see Move Position	see Find & Mark
see also Sort Subordinates	Secondary Sort, 4-2
replace employee, 6-3	secretaries
Report Format form, 4-5	see staff level employees
averages and subaverages, 4-6	selecting commands, 3-1
draw box around page, 4-5	keys, A-2
fill lines with dots, 4-5	see also making choices
page numbers, 4-5	selecting menu items
print counts, 4-6	keys, A-2
totals and subtotals, 4-6	see also making choices
skip line on letter change, 4-5	selecting ranges, 6-1
Report Print Control form, 4-7	serial port, 2-7
double space, 4-7	Set Option (Alt-F7), 6-13
narrow line spacing, 4-7	Alternate Text Field Print, 6-14
print marked positions, 4-7	Box Style, 6-14
small type font, 4-7	Chart Style, 6-13
reports	Do Not Count, 6-15
printing, 4-5	Exclude from Amount, 6-15
setting up	Plotter Pens, 6-14
see Table Setup	Suppress Amount Print, 6-15
Report Titles, 4-4	shadow
Reprint (Ctrl-2), 3-20	see box style
Reprint Part (Alt-2), 6-24	sheet feeder, 2-6
requirements	show chart status
equipment, 1-4	see View Chart Status
Retrieve Chart, 3-22	show clipboard
see also Main Menu	see View Clipboard
	see then empooned

show entire chart	specifications, C-1
see Preview Chart	Squeeze Chart, 3-18
show higher work group, 3-13	staff level
show lower work group, 3-13	definition, 3-5
show marked positions	staff-level employees
see Review Marked	see staff level position
show table	staff-level location, 3-5, 3-10
see View Table	staff-level position, 3-5, 3-10, 3-19
show top work group, 3-14	with subordinates, 6-22, B-3
show work group to left, 3-13	stagger
show work group to right, 3-13	see chart style
Sib, 5-7	starting a chart, 3-8
siblings	starting a fixed-disk system, 2-3
definition, 3-6	starting a one- or two-diskette drive system, 2-2
as range for commands, 6-1	status of chart, 6-12
as range in functions, 5-7	STD (standard deviation function), 5-6
Sideways™, 6-26	
disk file format, 6-26, 6-25	stop bits see Printer/Setup
printing, 6-27	Sub, 5-7
setting Glue Lines, 6-27	,
size	subordinates adding to work groups, 3-10
chart, 3-17	as range for commands, 6-1
paper, 2-6, 3-17	as range in functions, 5-7
see also limits	for staff-level position, 6-22, B-3
Skip Line on Letter Change	maximum number, 3-10, C-1
see Report Format	sorting, 6-7
small type font	titles and comments, 3-11
see Use Small Type Font	subordinates' box
some essential terms, 3-2	definition, 3-3
sort	subtitle, chart, 3-16
by last name, 4-3	SUM
how to set up, 4-2	sum consolidation type, 5-8, 5-9
positions in chart	sum function, 5-6
see Sort Subordinates	Suppress Amount Print
primary sort, 4-2	see Set Option
reports, 4-2	suppress printing
secondary sort, 4-2	amounts, 6-15
tables, 4-2	text field, 6-21
Sort Last Name First, 4-3	surname
Sort Subordinates (Shift-F3), 6-7	see Sort Last Name First
span of control	switch block
see limits	see Printer/Setup
Special Box Contents form, 3-19	occ 1 inter/ betap
Special Formats (Shift-F10), 6-20	
Alternate Text Fields 1-4 on corners, 6-20	
Alternate Text Fields 5 and 6, 6-20	
Overlap Printing of Pages, 6-20	
Using Chart Style, 6-20	

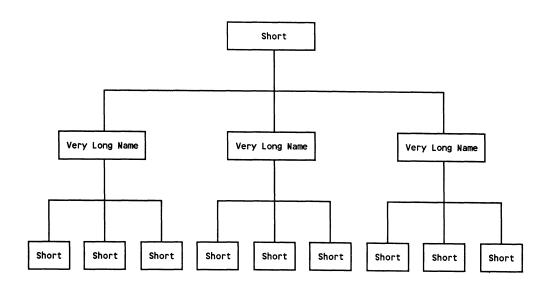
${f T}$	${f U}$
Table Setup (Shift-F1), 4-2	unattended printing
Tables/Reports commands, 4-1	see README
tables	unbroken
columns in, 4-2	see box style
how to display	underlining names and other fields, B-7
see View Table	unfilled position
how to print	see empty boxes
see Print Report	Unmark Positions (Shift-F8), 6-11
setting up, 4-2	Up — Show Higher Work Group (F6), 3-13
terms, 3-2	Use Narrow Line Spacing
text length	for chart, 3-18
judging, B-1	for report, 4-7
text outside boxes	Use Small Type Font
see Special Formats	for chart, 3-18
tips on making charts, B-1	for report, 4-7
title, chart, 3-16	using this guide, 1-3
Title field, 3-8	using WordStar commands, A-3
title length, 3-12, B-1	,
Titles & Annotations (F4), 3-16	${f v}$
Top, 5-7	VAR (variance function), 5-6
top-double	vertical boxes
see box style	see chart style
topmost	vertical listing of subordinates,
as range in functions, 5-7	see chart style
topmost manager, 3-8	View Chart Status (Alt-F1), 6-12
limits, 6-4, C-1	View Clipboard (Ctrl-F10), 6-6
two or more, B-5	View Options (Alt-F9), 6-16
Topmost — Show Top Work Group (Alt-F6), 3-14	View Table (Alt-F5), 4-3
trading off between chart width and height, B-3	replacing Index by Name, 4-4
transfer employee	replacing mack by Name, 4-4
see Move Position	XX 7
turn off marks	W
see Unmark Positions	what Org Plus can do, 1-1
turn on marks	what to put in text field 1, B-7
see Assign Mark	what you need, 1-4
see also Find & Mark	width of chart, 3-18, 6-13, 3-12, B-1, B-3
two-diskette drive system, 2-1, 3-8 starting, 2-2	width of paper setting, 2-6
two or more managers for one department, B-5	wild card characters
two or more topmost managers, B-5	in Find & Mark, 6-9 in classify function, 5-5
	WordStar editing commands, A-3
	work breakdown structure, 1-1
	<i>'</i>

work group adding subordinates to, 3-10 adding to chart, 3-11 as range in commands, 6-1 chart style, 6-13 definition, 3-2 moving to or between, 3-13 see also starting a chart working copy of Org Plus, 2-1 Work On Chart, 3-8

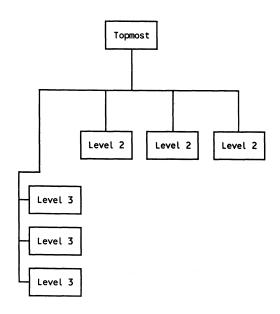
Y

yield factor see product consolidation type

Reference Chart 1



Reference Chart 2



Org Plus[™] makes Organization Charts ...Quickly and Professionally

Simply type the information into a display showing each position. Then choose from 8 box styles and 7 chart styles. Now Org Plus does the hard work.

Org Plus automatically, draws and spaces the boxes, positions the text, and precisely lays out the connecting lines. With a typical printer you have your chart in minutes.

Keep track of salaries, commissions, budgets, office space, and project hours with a minispreadsheet for each employee. Org Plus does the arithmetic so it is easy to compare results by individual, department or level.

Now Org Plus also prints tabular reports, like a company telephone book, right from the information in your chart. Even sort your reports by last name or department.

Use Org Plus to produce tree diagrams for a variety of applications—organization charts, work breakdown structures, family trees and more.

Org Plus requires an IBM PC/XT/AT, a Personal System/2 or 100% compatible computer with a minimum of 320Kb RAM. DOS version 2.0 or higher and a printer or HP plotter are required. Works with monochrome, CGA, EGA, VGA and Hercules display adaptors.

READ BEFORE OPENING

Banner Blue Customer License Agreement

tation to others.

No Warranty of Performance. THE PROGRAM AND DOCUMENTATION ARE LICENSED "AS IS" WITHOUT WAR-RANTY OF ANY KIND, INCLUDING BUT NOT LIMITED TO WARRANTIES OF PER-FORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUR-POSE. THE ENTIRE RISK AS TO THE **QUALITY, RESULTS, AND PERFOR-**MANCE OF THE PROGRAM IS ASSUMED BY YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU (AND NOT BANNER BLUE OR ITS REPRESENTA-TIVES) ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLU-SION MAY NOT APPLY TO YOU.

Limited Diskette Warranty. To the original licensee only, Banner Blue warrants the magnetic diskette on which the Program is recorded to be free from defects in materials and workmanship under normal use and service for a period of one (1) year from the date of delivery to you as evidenced by a copy of your receipt. Your exclusive remedy and Banner Blue's entire liability shall be the replacement without charge of any diskette meeting the "Limited Diskette Warranty" above which is returned to Banner Blue with a copy of your receipt.

Limitation of Liability. NEITHER BANNER BLUE NOR ANYONE ELSE WHO

HAS BEEN INVOLVED IN THE CREATION, PRODUCTION, OR DELIVERY OF THIS PROGRAM SHALL BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS, BUT NOT LIMITED TO, LOSS OF ANTICIPATED PROFITS OR BENEFITS, RESULTING FROM THE USE OF THE PROGRAM OR ARISING OUT OF ANY BREACH OF ANY WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF DIRECT INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Term. This license is effective until terminated. You may terminate it at any time by destroying the Program and Documentation together with all copies. It will also terminate if you fail to comply with any term or condition of this License Agreement. You agree upon such termination to destroy the Program and Documentation together with all copies.

Acknowledgement. YOU AGREE THAT THIS LICENSE AGREEMENT IS THE COMPLETE AND EXCLUSIVE STATE-MENT OF THE AGREEMENT BETWEEN US AND SUPERSEDES ANY PROPOSAL OR PRIOR AGREEMENT, ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN US RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

Miscellaneous. This License Agreement shall be governed by the laws of the State of California.

IMPORTANT: THE ENCLOSED PROGRAM IS LICENSED BY BANNER BLUE UNDER THE TERMS BELOW. OPENING THIS PACKAGE INDICATES YOUR ACCEPTANCE OF THESE TERMS. IF YOU DO NOT OPEN THE PACKAGE IT MAY BE RETURNED FOR A REFUND.

License: You have the non-exclusive right to use the enclosed Program on a computer that you own or use subject to the terms and conditions of this license agreement.

Copyright: The Program and its Documentation are copyrighted. You may not copy or reproduce any part of the Program or its Documentation except for back-up purposes. You may make a maximum of two (2) back-up copies of the Program.

Permitted Use and Transfer: You may physically move the Program from one computer to another, provided that the Program is used on only one computer at a time. You may transfer this license together with the original and all back-up copies of the Program and its Documentation, provided the transferee agrees to be bound by the terms of this License Agreement.

Prohibited Use and Transfer: You may not transfer the Program electronically from one computer to another over a network or similar system that provides access to multiple users. You may not grant sublicenses, leases, or other rights in the Program to others. You may not reverse assemble, reverse compile, or make alterations in the Program. You may not distribute copies of the Program or Documen-

© Copyright 1985, 1986, 1987 Banner Blue Software Incorporated All Rights Reserved

Printed in the United States of America



Banner Blue P. O. Box 7865 Fremont, CA 94537 (415) 794-6850