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10260 Bandley Drive
Cupertino, California 95014
(408) 996-1010

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APPLE Product #A2L0070
(039-0135-00)
Apple II

Dow Jones News & Quotes Reporter
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DOW JONES REPORTER
CHAPTER 1
STARTING THE PROGRAM

INTRODUCTION

The Dow Jones News & Quotes Reporter is a program that brings you news from the Dow Jones News Wire, the Wall Street Journal, and Barron's, and brings you quotes from the Dow Jones Data Base. The program works with the Apple II or Apple II Plus computer; the Apple Disk II disk drive with a controller set up to use 16-sector diskettes; and equipment that connects the computer to a telephone line. When the Apple is connected to the Dow Jones computer via telephone line, the Apple's video monitor can display news or quotes for any security you select from the lists in the Dow Jones News/Retrieval directory. With the Apple connected to a printer, you can get a printed copy of all the news stories and headlines that appear on the screen.

The stock market information, available via a local telephone call in many areas of the United States, has been delayed 15 minutes to conform to legal requirements.

When using the program, you have a choice of over 6,000 securities from the major exchanges. These securities, their symbols, and the Dow Jones News/Retrieval telephone numbers are listed in the Dow Jones News/Retrieval directory. Use the directory as a reference when you are using this program.

This manual assumes that the Apple system is set up correctly and that you're somewhat familiar with using it. If you're not sure that your Apple is set up correctly, see Appendix A for information on how to set up the system. This manual refers to the program both as the "Dow Jones News & Quotes Reporter" and as the "News & Quotes Reporter". When you read this manual for the first time, we recommend that you try out the suggested procedures as they are presented.

Occasionally in this manual, you will see the symbol

This indicates that the following paragraph contains information that gives you a "helping hand". The symbol

announces that the next paragraph informs you that you need to watch for special warnings about the behavior of your Apple.
WHAT YOU NEED

To use the Dow Jones News & Quotes Reporter, you need

* an Apple II or Apple II Plus with 48K of memory,

* at least one disk drive with a disk controller card with 16-sector proms (part #341-0027 and 341-0028),

* the Dow Jones News & Quotes Reporter diskette,

* the Dow Jones News/Retrieval Operating Guide and Directory of Symbols,

* your password (which Dow Jones supplies),

* a modem (the device that connects the Apple to the telephone line) and its interface card, and

* a video monitor or television.

You should also have a copy of the DOS manual for reference. And, if you want to print copies of the information you get from the News & Quotes Reporter, you need

* a printer and an interface card for the printer.

BOOTING THE DISKETTE

With many Apple II systems, the Dow Jones News & Quotes Reporter program starts automatically as soon as you put the diskette in the disk drive and turn on the Apple. "Booting" is the term for the process of starting a program that's on a diskette. Here's how to boot the Dow Jones News & Quotes Reporter—we recommend that you try it as you read.

The package for the Dow Jones News & Quotes Reporter contains two diskettes—one labeled "master" and one labeled "backup". Keep the backup copy of the diskette in a safe place (away from heat, magnets, and dust). If the master copy of the News & Quotes Reporter is destroyed, you can use the backup copy while you send the master copy to your dealer to be replaced.

If you have an Apple II Plus or an Apple II with the Autostart ROM:

1) Place the diskette marked DOW JONES NEWS & QUOTES REPORTER—MASTER in the disk drive as shown in the DOS manual. If you hold the diskette in your right hand (palm up), with your thumb over the label, it’s almost guaranteed that you’ll insert the diskette correctly. Make sure you close the drive door after inserting the diskette.
2) Turn on the Apple.

If the disk drive's IN USE light comes on, and the drive makes whirring and clicking noises, then your system is automatically booting the diskette and you can go to step 3.

If you have an Apple II with the old monitor ROM, an asterisk (*) will appear on the screen when you turn on the Apple. Type 6 CTRL-P to start the disk drive.

If the drive just whirs for more than 30 seconds, your Apple may have the old 13-sector disk proms. Turn off the Apple, take out the disk controller card, and make sure the socket labeled PROM P5 contains part #341-0027 and the one labeled PROM P6 contains part #341-0028. Then put the card back in the Apple and turn the Apple on again.

3) Once the Apple has booted the diskette, the video screen should show

![Welcome Screen]

If this "welcome" screen does not appear even though steps 1 and 2 worked properly, read Appendix A on how to set up the system.

If your Apple doesn't have a communications card in slot #2, the screen will say

![Communication Error Screen]

TO LEAVE THE PROGRAM, PRESS ESC.
After you press ESC, the screen displays the end-of-program messages:

PLEASE HANG UP YOUR PHONE,
THEN PRESS RETURN.

and, after you press RETURN:

Unless you have an Apple with the old monitor ROM, if you press the
RESET key, the system reboots itself, and starts the program again.
If the monitor prompt (*) appears on the screen, you need to type 6
CTRL-P to reboot the program.

Pressing RESET takes you back to the beginning of the program. And, at
its beginning, the program functions as if the Apple is not connected
to the Dow Jones network—even if you accidentally pressed RESET when
the Apple is connected to the network.

Beware of pressing RESET if you’re booting a diskette other than the
News & Quotes Reporter. It could destroy the diskette’s contents.
Always turn your Apple off and then on again before booting another
program.

SIMPLIFIED STRUCTURE OF THE PROGRAM

The following diagram provides an overview of the structure of the Dow
Jones News & Quotes Reporter.
Each of the five options in the center of this structure is an option on the main menu of the News & Quotes Reporter. The term "menu" is often used in computer programs to indicate a list of choices.

**THE MAIN MENU**

After you boot the News & Quotes Reporter program, the screen displays the welcome you saw above. From that welcome screen, press RETURN to get this menu:

```
DOW JONES
NEWS & QUOTES REPORTER

1 NEWS RETRIEVAL SERVICE
2 STOCK QUOTE SERVICE
3 CUSTOMIZING FEATURES
4 DISCONNECT DOW JONES
5 EXIT NEWS & QUOTES REPORTER

CHOOSE YOUR SELECTION
```

This is the program's main menu. It lists the main options available in the program: News Retrieval Service, Customizing Features, and Stock Quote Service. From this menu, you can also disconnect your Apple from the Dow Jones Network or leave the program.

**CUSTOMIZING FEATURES**

This section describes the options for customizing the communication between your Apple and the Dow Jones News/Retrieval Service. Before you use the News Retrieval Service, you need to tell your Apple the following things
* the local telephone number for the Dow Jones News/Retrieval Service,
* an alternate Dow Jones telephone number in case the first number is busy,
* your password, and
* how many characters your printer prints per line (if you have a printer).

Throughout the News & Quotes Reporter, you will see a white square called the "cursor". The cursor shows you where you are in the program and indicates when you need to type instructions or answers. For example, notice that on the main menu, the cursor appears after CHOOSE YOUR SELECTION to show that you need to type a number to choose your selection. To choose Customizing Features, type 3 and press the RETURN key. The screen then displays the menu for Customizing Features:

![Customizing Features Menu](image)

You can use the program to store your customizing data on the diskette, so you can use the same data each time you use the News & Quotes Reporter. And, any time you use the program, you can change one or more of the features to reflect changes in your communications scheme (e.g., if you want to use a different telephone number or password).

**TELEPHONE NUMBER**

Look in the Dow Jones News/Retrieval Directory for the local Dow Jones telephone number. Type that number after TELEPHONE NUMBER. For example, let's assume you are in Cupertino, California. Type 446-1470.

If you have made a typing mistake, you can use the left-arrow key to erase the characters that are wrong. For example, press the left arrow until you have erased 446-1470. The Apple beeps when you reach the limit of backspacing or forwards-spacing.
Now, type your local Dow Jones telephone number. Otherwise, your call could go through to Cupertino, and it might be expensive. When you’re sure the telephone number is the one you want to use, press RETURN.

Throughout the program, pressing the RETURN key moves the cursor to the next item on a screen or to the next screen.

Pressing RETURN tells the program that you have finished with the current item and are ready to move on to the next item. The cursor should move down to ALT. TELEPHONE NO. If the first telephone number is busy or otherwise unavailable, the program may use the alternate number for the autodial modem.

If you’re using an autodial modem, you may need to include an asterisk (*) to indicate where there should be a slight pause when dialing part of the number, such as 9 or 1 used to get an outside line from some business phones.

Select an alternate telephone number from the Dow Jones News/Retrieval Directory. Type the alternate telephone number, following the same procedure you used for the main telephone number, but this time insert a 9*. (Delete the 9* later if you don’t need it.)

Your alternate number should look something like this: 9*941-8450

After you type the alternate number and press RETURN, the cursor moves down to PASSWORD.

PASSWORD

When you sign the contract to use the Dow Jones News/Retrieval Service, you receive a password. Type your password, following the same procedure you used for the telephone numbers.

For this program, the Apple’s memory has a display that is 80 characters wide. The Apple’s 40-character screen normally shows only the leftmost 40 characters. To see the rightmost 40 characters, press the CTRL key at the same time as you type the letter A. The screen will go blank because the rightmost 40 characters are all blank for this program. If you accidentally press CTRL-A while typing your password, the screen will go blank. Press CTRL-A again to return the text to the screen.

As you type the letters of your password, the screen displays an X for each letter you type. When you press RETURN, the program asks you to

ENTER PASSWORD AGAIN TO VERIFY.

Type your password again. The program checks the two versions you typed. If they don’t match (e.g., you made a typing error in one of them), the program displays the message
THEY DO NOT MATCH. PRESS RETURN.

When you press RETURN, the cursor moves back to PASSWORD and you get another try at typing your password correctly twice.

If you don’t want to save a password, press the space bar, then press the RETURN key. Then, each time you log on, the program will ask you to type your password. ("Log on" is computer jargon for connecting with a computer or computer network.) This may be convenient if you use the News & Quotes Reporter for more than one account.

If you do have the program save your password on the diskette, the program supplies the password for you each time you log on. That way, you don’t have to type it each time. The diskette stores only one password at a time, so if you have more than one account, be sure that you’re using the correct password for that account, otherwise the wrong account may be charged for the time you’re logged on.

If your Apple has a printer interface card in slot #1, as soon as you have typed your password and pressed RETURN, the cursor moves to PRINTER LINE WIDTH.

If your Apple doesn’t have a printer interface card in slot #1, the program asks you

IS THIS INFORMATION CORRECT? N

This question also appears if you specify a printer line width.

PRINTER LINE WIDTH

The maximum line width for a printer is 80 characters, as shown on the screen. If your printer prints at least 80 characters per line, press RETURN to leave the 80 on the screen. If your printer prints fewer than 80 characters per line, type 40 and press RETURN. Otherwise, you get the message

PLEASE ENTER 40 OR 80

After you type 40 or 80 and press RETURN, the program asks you

IS THIS INFORMATION CORRECT? N

The program accepts only Y or N or RETURN as responses. If you press RETURN, that tells the program that your answer is "no", which is the default shown on the screen by the letter N. To change information for a feature, press RETURN (e.g., you may not want the * and the 9 for the alternate telephone number). The cursor will move to TELEPHONE NUMBER. From there, you may type new data for each item or move the cursor through the items until you get to the one you want to change.
TWO USES FOR ARROWS

To move the cursor from feature to feature, you may press RETURN or use the arrow keys. Until you type the first character after a prompt (e.g., TELEPHONE NUMBER), you may use the arrows to move the cursor back and forth from feature to feature. Pressing the left arrow once moves the cursor back to the previous feature. Pressing the right arrow once moves the cursor forward one feature.

Throughout the program, unless you are typing a response to a prompt or correcting a typing mistake, the right arrow and RETURN keys perform the same function—tabbing from one item or page to the next item or page. For example, press the right arrow to move the cursor to ALT. TELEPHONE NO.

The arrows’ other use is correcting typing errors. Type the first digit of the number you want to use as your alternate telephone number. After you type that first digit, the arrows move the cursor only within the characters of the phone number. Try pressing the right arrow and left arrow until you reach the limits of movement within the phone number. The Apple beeps to let you know when you reach the limits. Now type the alternate telephone number you want to save, and press RETURN.

The arrows again move the cursor from feature to feature—untill you type the first character (or press the space bar) for one of the features.

SAVING CUSTOMIZING DATA

Check all the information on the screen, and correct the features so that the information is the way you want it. Then press the right arrow until the screen displays

IS THIS INFORMATION CORRECT? N

To answer "yes", type Y and press RETURN. The program displays the message

UPDATING DISKETTE...

while it stores the customizing data on the diskette. Then the main menu returns to the screen.

This is the only way to store those data and to change old customizing data on the diskette. The program uses the stored customizing data when you log on.
The program cannot store data on a flawed or write-protected diskette. If your diskette is flawed or write-protected, if you leave the disk drive door open, or if you take out the diskette, the screen displays the message

YOUR DISKETTE IS FLAWED.

TO RESTART, REBOOT YOUR SYSTEM.

Contact your Apple dealer to replace the flawed diskette or see the DOS manual for information on write-protected and non-write-protected diskettes.

You can press the ESC key to return to the main menu from Customizing Features, but this does NOT save the customizing data you just typed.

To check Customizing Features and see that your telephone numbers (and printer width) are the way you want them, type 3 from the main menu. After you confirm that Customizing Features contains the information you want it to, press ESC to return to the main menu.

LOG-ON PROCEDURE

Two of the options on the main menu--News Retrieval Service and Stock Quote Service--work only when your Apple is connected with the Dow Jones News/Retrieval Network. The procedure for connecting with the News Retrieval Network requires a telephone line and a modem. You also need your password, which Dow Jones supplies when you contract with them to use the News Retrieval Network.

Before you try to log on, make sure all the necessary equipment is set up and turned on. Appendix A lists the equipment and manuals that you need for this process.

The procedure you use to log on depends on which type of modem is in your Apple--autodial or acoustical. To log on, you must first select either the News or the Quotes option from the main menu. Let’s look at News first. From the main menu, type 1 to select the News Retrieval Service option.

AUTODIAL MODEM
If you have an autodial modem, the procedure for logging on is very simple. The Apple and the autodial modem automatically connect your system with the Dow Jones network. If you haven’t saved at least one
local telephone number for the Dow Jones News/Retrieval Service on the diskette, the program asks you to type one. The program uses that number only once—it doesn’t save the number.

If you’ve been doing the examples, you’ve selected the News Retrieval Service from the main menu, and the screen is displaying

![LOG-ON PROCEDURE](image)

The screen displays messages, printed one line at a time as the Dow Jones computer system confirms your password and authorizes access to the information. This final part of the logging on procedure usually takes about 30 seconds per message. The messages are

**Making Local Connection**

**Making Network Connection**

**Making Dow Jones Connection**

**Password Verification**

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If you haven’t stored your password, the program asks you to

**Enter Password**

Type your password. The program then must verify that your password is valid, and gives you the message

**Password Verification**

If the program can’t verify on the first try that your password is correct, it asks you again to

**Enter Password**
If this happens, type your password again. You may have made a typing error before. If the password you type is still not verified, the screen tells you

After you press RETURN, and before you try to log on again, check your copy of the password Dow Jones gave you.

If connecting with the Dow Jones computer takes more than one minute, you may get the message

YOU HAVE BEEN DISCONNECTED.
TO CONTINUE, PRESS RETURN.

This indicates that the network has dropped the connection with your Apple, most likely because the network was very busy. Wait a few minutes, then try logging on again.

When log on is completed, the program goes automatically to your chosen option, in this case, the News Retrieval Service.

ACOUSTICAL MODEM

Logging on using an acoustical modem is slightly more complex. After you select News Retrieval Service from the main menu, if you have saved a telephone number on the diskette, the screen displays
If you haven’t saved a telephone number on the diskette, the program asks you to use the local number from the Dow Jones News/Retrieval Directory.

Dial the local number, then listen to the phone: you’ll hear a high-pitched tone when the network computer answers. Place the telephone receiver in the modem, making sure the telephone cord is at the proper end of the modem. If you’re not sure which way to put the telephone, consult your modem manual.

After you put the telephone receiver in the modem, press the RETURN key. The rest of the log-on procedure follows the same steps as for the autodial modem, giving the same messages on the screen to let you know how it’s progressing.

If you have trouble logging on to the Dow Jones computer, check that

* the modem and its interface card are properly installed,

* the switches on the modem are properly set (300 baud, full duplex, and originate), and

* the telephone is working properly.

If the weather is stormy, an unusual amount of "noise" on the telephone line may cause a problem. If the Dow Jones computer or one of the network computers that connects your Apple to the Dow Jones computer is not working properly, you may receive a message to that effect, or you may be unable to log on. Try another alternate telephone number. If three or four tries at logging on are unsuccessful, hang up the phone, and wait half an hour or so before you try again.

TIMEOUT

If you don’t press RETURN after placing the phone in the modem, the program will wait patiently for you to press RETURN. If you take too much time placing the phone in the modem after the computer answers, or if you wait too long to press RETURN after putting the phone in the modem, the Dow Jones network may break the phone connection, and your screen will say

YOU HAVE BEEN DISCONNECTED. PLEASE HANG UP YOUR PHONE, THEN PRESS RETURN.
CHAPTER 2
GETTING NEWS AND QUOTES

This chapter describes how to retrieve news and quotes from the Dow Jones News Services. Using the News Retrieval Service, you can get headlines and stories from the Wall Street Journal, the Dow Jones News Wire, and from Barron's. Using the Stock Quote Service, you can get information on over 6,000 securities traded on the New York, American, Midwest, and Pacific exchanges as well as U. S. Treasury issues and OTC transactions. Refer to the Dow Jones News/Retrieval Directory for the list of companies and topics for which you can get news and quotes.

DOW JONES NEWS/RETRIEVAL SERVICE

The Dow Jones News/Retrieval Service brings you headlines and stories on public corporations, industrial categories, and government agencies.

The following diagram shows the structure of the News Retrieval Service portion of the News & Quotes Reporter.

SIMPLIFIED STRUCTURE OF THE NEWS RETRIEVAL SERVICE

![Diagram of the News Retrieval Service structure]

First, let's get some headlines about a stock. If you have been doing the examples we've suggested, you should be logged on and see this on your screen:

![News & Quotes screen example]
This screen prompts you to type the symbol for the company or category about which you want news.

From here, and from most other points in the News Retrieval Service portion of the program, you can get back to the main menu by pressing the ESC key.

Look in the Dow Jones News/Retrieval Directory for the lists of Dow Jones symbols. Each Dow Jones symbol is a code for the name of a company or category. We’ll use HR, the code for International Harvester, as the sample symbol in this section of the manual.

**GETTING NEWS**

Notice that the message

DOW JONES SYMBOL: ......

includes six dots, which indicate that a symbol has a maximum of six characters. Type the symbol HR to start getting news. The screen changes to

From here, you can get the most recent story or any page of headlines for your selected symbol. Notice that the message on the screen assumes you don’t want the story.

**ANOTHER TIMEOUT**

To keep your Apple logged on to the Dow Jones Network, you must continue sending or receiving messages. If a few minutes elapse during which you don’t request information from Dow Jones, the Dow Jones computer may disconnect your Apple. This protects you from leaving the Apple logged on to the Network while you’re not using it. For example, you might be interrupted by some other work that you think will take just a moment, but turns out to take half an hour.
If your Apple has been disconnected, when you next type something on the Apple, it will attempt to get the information you requested. When it finds that the Dow Jones computer has broken the connection, the Apple will automatically log on again, displaying the series of messages about connecting with the Network and Dow Jones. The program then picks up at the place where you last asked for information.

For example, while you have been reading this long explanation about timeout, the Dow Jones Computer may have broken the connection. If the Dow Jones computer has broken the connection, the News and Quotes Reporter will try to get news about HR, discover that the connection is broken, and automatically go through the process of logging on again. You’ll see

MAKING NETWORK CONNECTION

and the rest of the log-on messages again. If you haven’t stored your password, you’ll need to type it again.

After a long period during which you don’t request information from Dow Jones, the local computer (i.e., the one that answers the phone when you log on) will disconnect your Apple. In that case, when you next type a request on the Apple’s keyboard, the screen displays the message

YOU HAVE BEEN DISCONNECTED. PLEASE HANG UP YOUR PHONE, AND PRESS RETURN.

After you press RETURN, the main menu returns to the screen, and you must log on again.

HEADLINES

Now for the news. Assuming that you’re logged on, and that you’ve typed HR, you should be looking at a screen that asks

CURRENT STORY ? N

Press RETURN to get the headlines. After you press RETURN, the screen should say

CONFIRMING SYMBOL WITH DOW JONES.
Then it should display

![Headline Page 0/4](image)

Press the right arrow to get the first of the headlines. The program takes a few seconds to send the message to Dow Jones and get back the headlines, which will look something like this:

![Headline Page 1/4](image)

This is about half of a "page" of news headlines. In the upper-right-hand corner of the screen is a page number, which for this page of headlines is "PAGE 1/4 [A]". This tells you that you're looking at the first half [A] of page 1 of 4 pages. When you're looking at the second half of a page, the letter [B] follows the page number. Not all pages have both an [A] and [B] screen—in particular, the last page of a set of headlines may have only an [A] screen.

The first 2 or 3 characters of each headline are the code for that headline's story. Jot down a few of the codes so you can retrieve stories later.

If you type an invalid symbol, the program tries twice to get headlines for it. It displays the message

TRYING TO SEND MESSAGE AGAIN.
as it sends the symbol to the Dow Jones computer, then displays

**INVALID ENTRY.**

to let you know that the Dow Jones computer doesn’t accept the symbol you typed. Look in the News/Retrieval Directory to make sure you typed the symbol correctly. Note that the symbols may change and that the Directory contains a telephone number to call for the latest information on changes in symbols. After an invalid entry for the symbol, the cursor appears after DOW JONES SYMBOL to show that you need to type another symbol.

When you finish reading the first screen of headlines, you need to choose what you will do next. The bottom of the headlines screen shows the general options of getting more news, printing news, or getting a new symbol. The options include paging through the headlines, specifying a story ID, printing what’s on the screen, specifying a new symbol, and getting a help screen. Most of these same options appear at the bottom of the screen for stories.

**PAGING**

Paging is a term for going from one screen of news to another screen of news. The two ways to page are typing a page number and pressing the arrow keys. When the cursor appears after HEADLINE PAGE # OR STORY ID, you may select any page of headlines by typing its number. For example, type

3

The screen displays part [A] of page 3. The higher the page number, the older the headlines. If you type a number that doesn’t have a page of news (e.g., a number that’s too large), the screen says

**NO SUCH PAGE.**

To see the previous screen of headlines, press the left arrow. Following the example, this gives you the [A] screen of page 2. To see the next screen of headlines, press the right arrow. This gives you the [B] screen of page 2. Try pressing the arrows several times to page through the headlines. When you reach the end of the headlines, the Apple beeps. If you’re paging backwards, the Apple beeps to let you know when you reach the beginning.

If the network is sending you news when the Apple beeps, you may not get all the characters it sends.

ESC does not always return the main menu to the screen. For example, you can use it to stop the current display of news. For both headlines and stories, you may press ESC when news is still appearing on the screen. The cursor drops to the bottom of the screen as if you had received all the news for that screen. However, when the cursor is
at the bottom of the screen, ESC does return the main menu to the screen.

STORIES
Prepared with the IDs for stories, you can select any story from a headlines page. At the bottom of the headlines page is the prompt

STORY ID: ...

To get a story, type its code. For example, type BH
and the screen displays the story line by line until the screen is full. For example,

When the screen is full, the cursor moves to the bottom of the screen, after PAGING. You may use the arrow keys and RETURN to page back and forth through a story. You can't specify a page number. At the end of a story, you may choose from the options listed at the bottom of the screen. Most of these are the same as the options summarized for the headlines screen, with the addition of one possibility. Type H
to get back to the headlines screen. To get another story, you must return to the headlines screen.

Occasionally, you may get a blank news screen after a page of a story because of the way stories are transmitted. The time of day (e.g., 1 57 PM) usually appears at the end of each story. If you get a blank story screen, you can tell if you've received the entire story or not by paging back one screen from the blank screen and looking for the time. Or you can page forward until the Apple beeps.

If the Apple received only part of a page of headlines (e.g., if you press ESC while the Apple is receiving headlines), you'll see a question mark at the end of the headlines when you return to the
headlines screen from a story screen. Type the headlines page number to get the complete page of headlines.

The first news screen contains the prompt

CURRENT STORY?  N

If you type Y and press RETURN in response to that prompt, the screen says RETRIEVING CURRENT STORY then displays the most recent story for the symbol.

PRINTING HEADLINES AND STORIES
If you don't have a printer, you may skip this section of the manual.

So far, you've been looking at the news on the screen. If you want a more permanent copy, you can use a printer (such as the Silencity™) to get a copy printed on paper. See Appendix A for directions on connecting the Apple to a printer. Once you're ready to have something printed, check that the printer is on.

Printing a document from a headlines or story screen is easy and straightforward. Type an exclamation point ! to print the text that is on the screen. The program will say CHECKING FOR REMAINDER OF TRANSMISSION as it verifies that it has a complete page to print. Then, if the printer is properly installed, it will begin producing your copy. It will print one page of headlines or an entire story.

If the printer doesn't start printing, the screen may display the message PRINTER NOT AVAILABLE.

Check to be sure the printer is on and is correctly connected to the Apple. If the screen has no headlines or stories on it, and you type !, the printer will print one or more blank lines.

To stop printing before a whole page is printed, press ESC.

When the program is sending a message to the Dow Jones computer, or receiving data, the Apple doesn't respond to your pressing the ESC key. For example, when the program is retrieving the next page of a
story to be printed, it ignores the ESC. Before you can stop the printing process, you must wait until the printer starts again.

GETTING NEWS FOR ANOTHER SYMBOL

To get news for another symbol, select a symbol from the Dow Jones News/Retrieval Directory. Get back to the headlines page, then type * from the headlines page. The screen clears, except for the current symbol. Notice that the cursor is between DOW JONES SYMBOL and HR. Type the new symbol and press RETURN. HR will disappear and the new symbol will appear in the upper-left-hand corner of the screen. You may then repeat the procedures you just followed to get headlines and stories.

When you have read or printed all the news that you want, press the ESC key to get back to the main menu.

NEWS HELP SCREEN

If you want a quick reference to the options for the News Retrieval Service, you can get help from the program by typing a question mark ? from either a headlines or a story screen. After you type the question mark, the program displays a "help" screen, which summarizes the options

Press RETURN to get back to the headlines or story page from which you typed the question mark.
The Dow Jones Stock Quote Service brings you current quotes on common and preferred stocks, warrants, bonds, mutual funds, options, and U.S. Treasury issues. It provides quotes from the New York, American, Midwest, and Pacific exchanges. All quotes are delayed at least 15 minutes.

The following diagram shows the structure of the Stock Quote Service of the News & Quotes Reporter.

![Diagram of Stock Quote Service Structure]

To select the Stock Quote Service from the main menu, type 2.

If your Apple isn’t logged on, you must go through that process. The screen then displays:

```
STOCK QUOTES SERVICE
QUOTES DELAYED 15 MINUTES
SYMBOL [ ] [ ]
SECURITY
```

This is the stock quote service screen. From this screen, you can obtain quotes by typing a symbol from the Dow Jones News/Retrieval Directory, and then typing an abbreviation for the kind of security it is (e.g., stock, bond, etc.) If the security is a stock, you must also type an abbreviation for the exchange on which it’s traded. Once again the right arrow and left arrow serve two functions: to correct typing errors and to move the cursor around the screen.

Remember that you need to press RETURN after each entry to let the program know you’ve finished typing that entry.

Type the symbol for which you want a quote, for example HR.
Then press RETURN and type the abbreviation for the type of security,
for example
S
for stock. Now press RETURN and the EXCHANGE prompt appears. Type the
exchange, which for HR is
NY
for New York. Press RETURN again, and the screen asks you
IS THIS INFORMATION CORRECT?  N

If you’ve made a typing error, you may use the arrow keys to correct
the information. Then, when all the information is correct, type
Y
for yes and press RETURN. The screen displays the message
RETRIEVING QUOTE...

and then displays the quote:

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>BID (CLOSE)</th>
<th>ASKED (OPEN)</th>
<th>HIGH</th>
<th>LOW</th>
<th>LAST</th>
<th>VOLUME (100 S)</th>
</tr>
</thead>
</table>

If you type a symbol that doesn’t exist, or you use a nonexistent
combination of SYMBOL, SECURITY, and EXCHANGE, the program will let
you know. For example, if you typed JGB, S, and NY, you would get the
message
NO STOCK JGB ON EXCHANGE NY
DO YOU WANT ANOTHER QUOTE?  Y

because JGB is not a valid symbol for that exchange.

COMMENTS ON TYPE OF EXCHANGE

A composite quote is the average quote from all the exchanges on which
a stock is traded. If you don’t specify an exchange, the stock quote
service will give you the composite automatically, unless the security
is traded over the counter (OTC), in which case it will give you the
quote for over the counter. Generally, most symbols represent
securities that are traded only on one exchange, so the "composite"
quote reflects only that exchange. Often you will specify an exchange
only if you are looking for a bargain on a particular exchange.
GETTING MORE QUOTES

If you type

Y

in response to the question

DO YOU WANT ANOTHER QUOTE?  Y

the screen erases the quote and asks for symbol, security, and exchange again.

QUOTES HELP SCREEN

If you need help remembering the abbreviation for a type of security or an exchange, type

?  
to get the help screen for quotes.

This screen shows you what to type for each security or exchange, for example,

SECURITY       EXCHANGE

To get:          Type:       To get:          Type:
COMMON STOCK    S           NEW YORK       NY
PREFERRED STOCK S           AMERICAN       A
WARRANTS        S           MIDWEST        MW
WHEN ISSUED     S           PACIFIC        P
CORPORATE BONDS B           OTC/COMPOSITE space bar,
MUTUAL FUNDS    M                     then RETURN
OPTIONS         O
U.S. TREASURY NOTES T
AND BONDS       

You may also use the abbreviations N and M for the New York and Midwest exchanges.
After you’ve refreshed your memory, press the RETURN key to get back to the stock quote screen.

Let’s say you want to check on a bond now. Look in the Dow Jones News/Retrieval Directory for a bond symbol, then type it. For example, type BAMB

Then type the abbreviation for the type of security, which for BAMB is T for treasury issue. Notice that the prompt for EXCHANGE disappears.

For this program, you need to specify an exchange only for stocks. You don’t need to specify an exchange for any other type of security.

The screen will display the quote for BAMB

![Stock Quote](image)

At the bottom of the screen is the question

DO YOU WANT ANOTHER QUOTE? Y

When you have looked at all the quotes you want to see, type N in response to that question. The main menu will return to the screen.

**DISCONNECTING AND EXITING**

The last two options on the main menu are to disconnect from the Dow Jones network and to exit from the News & Quotes Reporter.

When you return to the main menu from either the News Retrieval Service or the Stock Quote Service, your Apple may still be logged on to the the network. To disconnect from the Dow Jones network, type 4 from the main menu. The screen will say
YOU HAVE BEEN DISCONNECTED.
TO CONTINUE, PRESS RETURN.

After you press RETURN, the main menu returns to the screen.

To leave the News & Quotes Reporter, type 5 from the main menu. If you have an autodial modem, the screen says

PLEASE UNPLUG YOUR AUTODIAL MODEM,
THEN PRESS RETURN.

If you have an acoustical modem, the screen says

PLEASE HANG UP YOUR PHONE,
THEN PRESS RETURN.

After you press RETURN, the screen says

THIS CONCLUDES THE
DOW JONES NEWS & QUOTES REPORTER.

TO CONTINUE, REBOOT YOUR SYSTEM.
APPENDIX A:

HOW TO SET UP THE SYSTEM

This appendix includes lists of the equipment the manuals that you’ll need to use the Dow Jones News & Quotes Reporter. You do not need to read all the manuals, but they should be on hand for reference.

LIST OF EQUIPMENT

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Part Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple II or Apple II Plus</td>
<td>A2S0048</td>
<td>At least 48K of memory. (Also works with language card.)</td>
</tr>
<tr>
<td></td>
<td>A2S1048</td>
<td></td>
</tr>
<tr>
<td>Video monitor or television</td>
<td>A2M0005</td>
<td>Black and white works best.</td>
</tr>
<tr>
<td>Disk drive and Controller Card</td>
<td>A2M0004</td>
<td>Must have 16-sector PROMs. May be purchased separately.</td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td>Standard receiver.</td>
</tr>
<tr>
<td>Modem IIA 2 and Interface Card</td>
<td>A2M0017</td>
<td>May be purchased separately.</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autodial modem</td>
<td></td>
<td>Others available, see dealer. Compatible with D. C. Hayes Micromodem II.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See your Apple dealer for a list of those that work.</td>
</tr>
<tr>
<td>Printer and Interface Card</td>
<td>A2M0032</td>
<td>Optional. Various are available; for example, the three listed here.</td>
</tr>
<tr>
<td>Silentype™</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer IIA</td>
<td>A2M0011</td>
<td></td>
</tr>
<tr>
<td>Qume</td>
<td>A2M0045</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF MANUALS

<table>
<thead>
<tr>
<th>Manuals</th>
<th>Part Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Jones Series</td>
<td>A2D0030</td>
<td>This manual.</td>
</tr>
<tr>
<td>The Dow Jones News &amp; Quotes Reporter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple II BASIC Programming Manual (Integer BASIC)</td>
<td>A2L0005</td>
<td>Describes how to set up the Apple II.</td>
</tr>
<tr>
<td>The Applesoft Tutorial</td>
<td>A2L0018</td>
<td>Describes how to set up the Apple II Plus.</td>
</tr>
<tr>
<td>DOS Manual</td>
<td></td>
<td>Describes how to boot a diskette.</td>
</tr>
<tr>
<td>Communications Interface Card Manual</td>
<td>A2L0007</td>
<td></td>
</tr>
<tr>
<td>Modem Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer Interface Manual and/or Printer Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dow Jones News/Retrieval Directory</td>
<td></td>
<td>Part of the News &amp; Quotes Reporter package.</td>
</tr>
</tbody>
</table>
PUTTING THE PIECES TOGETHER

Here are the steps to follow to put your system together:

1) If you have not already done so, you must sign a contract with the Dow Jones News/Retrieval Service and get your password. To get your password, complete the contract form while you're at your Apple dealer's. Then have the dealer call Dow Jones, receive the password over the phone, and distribute copies of the contract.

2) To set up your Apple, follow the instructions in the Apple II BASIC Programming Manual or the Applesoft Tutorial. Your Apple must have at least 48K of memory for you to use the Dow Jones News & Quotes Reporter.

3) To set up the disk drive with its interface card, follow the instructions in the DOS Manual. The interface card must have 16-sector PROMs, and be plugged into slot #6. If you don't have the Autostart ROM you'll need to know how to "boot" a diskette: see the DOS manual for that information.

4) The modem connects the telephone to the Apple. To set up the modem, follow the instructions that came with it. The interface card must be installed in slot #2 to work with the Dow Jones News & Quotes Reporter. The modem switches should be set to originate, full duplex, and 300 baud. Before you try to use an acoustical modem, be sure you know which way the telephone should be placed.

5) To set up the printer, follow the instructions that came with it. Install the interface card in slot #1. If you have an old high-speed serial interface card, check to see if it contains a P8-02 PROM. If it doesn't, contact your Apple dealer to get one. Various printers are available for the Apple—consult your dealer for information on the printers available. Most brands of printers made for use with computers can be used with the Apple.
APPENDIX B:
GLOSSARY

This appendix defines some of the terms used in this manual and in the New York Stock Exchange.

BEAR: one who believes the market will decline.

BEAR MARKET: a declining market.

BID: the opposite of an offer to buy. A bid is the highest price declared by a purchaser at any given time.

BID AND ASKED: also known as a quotation or quote. A bid is the highest price declared by a purchaser at any given time; the asked is the lowest price a seller will take at the same time.

BIG BOARD: the New York Stock Exchange.

BLUE CHIP: a company with a national reputation for high quality and wide acceptance of its products or services, and for its ability to make money and pay dividends.

BOND: a promissory note or IOU from a corporation. Bonds are usually issued in multiples of $1,000 or $5,000; sometimes they may be in $100 or $500 denominations. A bond represents debt—bondholders are creditors of the corporation, not part owners as are shareholders. Bonds are most often secured by a mortgage. The issuing company usually promises to pay the bondholder a specified amount of interest for a specified length of time, and to repay the loan on the expiration date of the bond.

BROKER: an agent handling the public’s orders to buy and sell securities, commodities, or other property. The broker receives a commission for those services.

BULL: someone who believes the market will rise.

BULL MARKET: an advancing market.

CAPITAL GAIN OR CAPITAL LOSS: profit or loss from the sale of a capital asset, either short-term (6 months or less), or long-term (more than 12 months). Long-term capital gains are taxed at a lower rate than short-term capital gains.

CAPITAL STOCK: all shares that represent ownership of a business, including preferred and common stock.

COMMISSION: the basic fee for a broker for selling or purchasing securities or property.
COMMON STOCK: securities representing an ownership interest in a corporation. The terms common stock and capital stock are used interchangeably when a company has no preferred stock. Common stockholders assume greater risk than bondholders and preferred stockholders, but often exercise greater control of a company, and may get dividends and capital appreciation.

CONVERTIBLE: a bond, debenture, or preferred share that the owner may exchange for common stock or another security (usually from the same company) in accordance with the terms of issue.

DEBENTURE: an unsecured bond. Also called a debenture bond.

DIVIDEND: payment designated by the board of directors of a company to be distributed pro rata among the shares. For preferred shares, this is usually a fixed amount; for common shares, it varies with the wealth of the company and the amount of cash on hand.

DOWN TICK: term for a transaction made at a price lower than the preceding trade. Also known as a "minus" tick.

EQUITY: common and preferred stockholders' ownership interest in a company. Also refers to excess value of securities over the debit balance in a margin account.

EX-DIVIDEND: synonym for "without dividend". Someone who buys a stock ex-dividend doesn't receive the recently declared dividend. When stocks go ex-dividend, the stock tables include the letter "X" after the name.

FLOOR: the trading area (about two-thirds the size of a football field) where stocks and bonds are bought and sold.

GOVERNMENT BONDS: bonds issued by the U.S. government, regarded as the highest grade issues.

ISSUE: any of a company's securities; also, the act of distributing securities.

LISTED STOCK: stock for a company that is traded on a securities exchange, and that has filed a listing application and registration statement with the Securities and Exchange Commission. The New York Stock Exchange, for example, usually requires that companies listed with it have national interest and a minimum of one million shares publicly held among not less than 2,000 round-lot stockholders. The company should also have net income in the latest year of over $2.5 million before federal income tax, and $2 million in each of the preceding two years.

LONG: term for ownership of securities. ("I'm long 200 shares of General Electric.")
MARGIN: the amount a buyer pays when using a broker's credit to buy a security. Under Federal Regulations, in the past 20 years the initial margin has ranged from 50 to 100 per cent of the purchase price.

MINUS TICK: see DOWN TICK.

NASDAQ: the National Association of Securities Dealers Automated Quotations, which is an automated network providing brokers and dealers with price quotations on securities traded over-the-counter.

NET CHANGE: the difference in the price of a security from the closing of the market one day and the closing price on the following day on which the stock is traded. The net change is usually the last figure on the stock price list. For example, +1 1/8 means up $1.125 per share from the last sale on the previous day the stock was traded.

ODD LOT: a unit of stock less than the standard 100-share unit or the 10-share unit of trading--from 1 to 99 shares for the great majority of issues, from 1 to 9 for inactive stocks.

OFFER: the price at which one is ready to sell.

OVER-THE-COUNTER: abbreviated OTC, a market composed of securities dealers who may or may not be members of a securities exchange. The market takes place mainly over the telephone, trading securities of thousands of companies that have insufficient shares, stockholders, or earnings to warrant application for listing on the New York Stock Exchange, Inc. or another exchange. The over-the-counter market is the principal market for U. S. government and municipal bonds.

PLUS TICK: see UP TICK.

POINT: for a share of stock, a point means $1. For bonds, $10.

PORTFOLIO: an individual's or institution's holdings of securities, which may be bonds, preferred and common stocks, mutual funds, options, treasury notes, and warrants.

PREFERRED STOCK: a class of stock with a claim to earnings and priority over common stock; entitled to dividends at a specified rate when the board of directors declares them--before payment of dividends on common stock.

QUOTATION: also, "quote"--the highest bid to buy and the lowest offer to sell a security in a given market at a given time.

ROUND LOT: a unit of trading (e.g., 100 shares of stock, $1,000 par value for bonds on the NYSE); also a multiple of that unit.

SEC: Securities and Exchange Commission, established by Congress to help protect investors.

SPLIT: dividing the number of shares of a corporation into a larger number of shares. A 4-for-1 split by a company with 1 million shares
results in 4 million shares. Each holder of 1 share before that split would have 4 shares after the split. Ordinarily, splits must be approved by directors and shareholders.

STOCK DIVIDEND: a dividend paid in securities rather than cash. The dividend may be additional shares of the issuing company or shares of another company (usually a subsidiary) held by the company.

STREET: the New York financial community in the Wall Street area.

UNLISTED: a security not listed on a stock exchange.

UP TICK: a term designating a transaction made at a price higher than the preceding transaction; also called a "plus" tick.

VOLUME: the number of shares traded in a security or an entire market during a given period, usually a daily basis. A daily average is computed for longer periods.

WARRANT: a certificate whose holder has the right to purchase securities at a stipulated price within a specified time limit (or perpetually).

WHEN ISSUED: a short form of "when, as and if issued", indicating a conditional transaction in a security authorized for issuance but not as yet actually issued.

ZERO-MINUS TICK: a transaction made at the same price as the preceding trade, but a lower price than the preceding different price.
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