

DOW JONES* INFORMATION SERVICES USER'S GUIDE

for use with ATARI®TELELINK™ I




A Warner Communications Company 

Use with
ATARI 400™ or ATARI 800™
PERSONAL COMPUTER SYSTEMS

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DOW JONES



A Warner Communications Company 

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PREFACE

Your TeleLink™ I package should contain a password certificate and a user agreement for Dow Jones Information Services. The password certificate entitles you to a free password and one free hour of introductory time. (See hours of operation, page 30.) To obtain a password, dial 1-800-257-5114 or in New Jersey, 609-452-1511, and give the confidential User Identification Code listed on your password certificate. To assure continuation of the service beyond your free hour, please send a completed copy of the User Agreement to:

Dow Jones & Company, Inc.
Information Services Group
Post Office Box 300
Princeton, New Jersey 08540

This manual includes tutorials on how to connect with Dow Jones Information Services and how to use the service. Once you have become familiar with the service, you will probably only need to refer to the *Operating Guide and Directory of Symbols* and the convenient reference card.

The tutorials teach through explanation and example. The examples shown will function "as is" in most cases. As you read the short explanatory paragraphs, it is a good idea to work all the examples on your computer.

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INTRODUCTION

The Dow Jones Information Services database contains the following information:

NEWS

News from the pages of the *Wall Street Journal*, *Barron's*, and the *Dow Jones News Service* (the "Broadtape")—as recent as 90 seconds ago, as far back as 90 days.

CURRENT QUOTES

Current-day market quotes on common and preferred stocks and warrants, corporate bonds, selected U.S. Treasury notes and bonds, options, and mutual funds. These are updated continuously as trades occur on the exchanges, with the minimum 15-minute delay established by the exchanges.

HISTORICAL QUOTES

Historical quotes from 1978 to the present are available on common and preferred stocks and warrants.

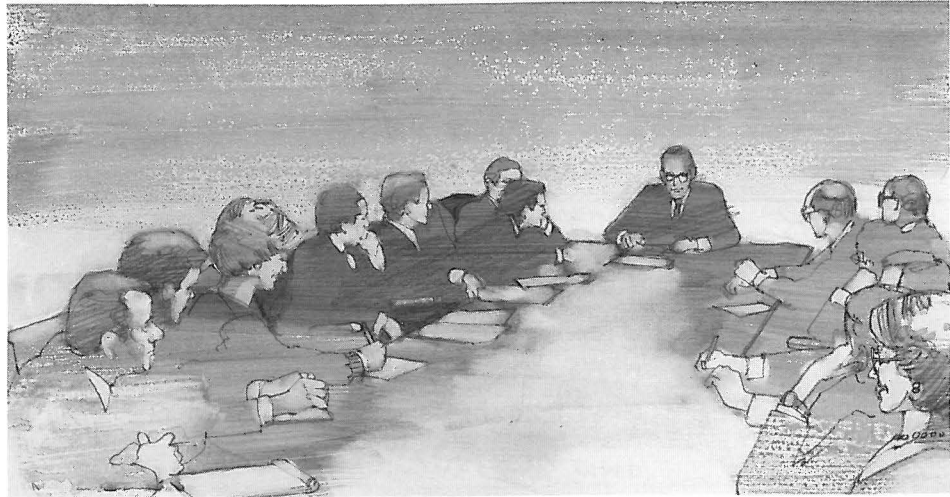
DETAILED FINANCIAL STATISTICS

More than 50 stock price, volume, and fundamental financial indicators are available for all New York and American Stock Exchange traded companies plus 800 over-the-counter traded companies. This information is supplied by Media General Financial Services, Inc.

Items in Dow Jones Information Services are cross-referenced in several ways to make sure you can find them simply and quickly so that you don't miss a key story. Many items are cross-referenced under two or more categories.

Just seconds after it breaks, you can call up current-day ticker news by asking for:

- All news
- A specific category such as stock market news or economic news
- The specific company, industry, or government agency involved.



Ours is the first information service specifically designed for busy people. It offers the speed of a wire service and the quality of the *Wall Street Journal*.

Dow Jones Information Services is uniquely suited for today's busy people for several key reasons:

- **It is current.** You can follow key events as they develop. Within seconds, breaking news is entered in Dow Jones Information Services and is ready to be accessed.
- **It is selective.** You only get the news you request. You don't need to read through airline news to find security news; or through Ford Motor Company when you want AT&T. You decide what you want.
- **It is quick.** You can get into the system, make your request, be done in a matter of minutes. You can scan the headlines first, and then pursue only the stories of interest.
- **It is simple.** This booklet can teach you to be comfortable using this service in a matter of minutes.
- **It gives you perspective.** The database goes back one business quarter (90 days) and allows you to scan headlines quickly in a particular industry, company, or government agency when you need an update.
- **It is a personal news file.** If you have been out of touch for several days—or even longer because of vacations, special projects, or heavy workloads—you can catch up in seconds.
- **It is a memory jogger.** Do you remember an article but not the date or the details? The 90-day file helps you find it.
- **It tracks investments.** Get reliable company news and quotes for companies you own or for companies you follow.

SIGNING ON WITH DOW JONES INFORMATION SERVICES

Turn on your **ATARI® 400™ or 800™ Personal Computer System**, television or monitor, **ATARI 850™ Interface Module**, **ATARI 830™ Acoustic Modem**, and any of the **ATARI Printers** (optional). Refer to the operator's manuals for detailed instruction on how to set up each item of equipment.

Insert the TeleLink™ I cartridge in your computer, and close the cartridge door. Your screen will read: "**ATARI TeleLink™ I, © ATARI, INC.**" Before continuing, hold down the control key (marked CTRL) and type **8**. This widens your video screen to accept 40-character lines from Dow Jones. See your *TeleLink I Manual* for further information on this feature.

CTRL 8

To connect with the Dow Jones Information Services host computer, dial your nearest Tymnet telephone number and put the receiver in your modem. Tymnet numbers are listed in the *Operating Guide and Directory of Symbols*, also included in this package. For information on an alternative telephone network, see How to use Telenet on page 31.

Dow Jones Information Services will then ask you for four bits of information:

Dow Jones: PLEASE TYPE YOUR TERMINAL IDENTIFIER

You Type: **A** (Note: The **A** will not appear on your screen.)

Dow Jones: PLEASE LOG IN:

You Type: **DOW1;;** (Note: The second semicolon will not appear on your screen.)

Dow Jones: WHAT SERVICE PLEASE????

You type: **DJNS** **RETURN**

Dow Jones: ENTER PASSWORD

You Type: Your 10-character password and press the **RETURN** key. (Note: As a measure of protection, your password will not appear on the screen.)

If you make a mistake answering these questions, the system will give you another chance to respond. For instance, if you responded incorrectly to "PLEASE LOG IN," Dow Jones would have replied "ERROR, PLEASE TYPE USER NAME." Again, you would type **DOW1;;**.

This is how your screen should look after you complete a routine log-on:

```
PLEASE TYPE YOUR TERMINAL IDENTIFIER
-1401-004-
PLEASE LOG IN: DOW1;
TO> HOST IS ONLINE

WHAT SERVICE PLEASE????
DJNS
ENTER PASSWORD
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX

DOW JONES NEWS/SERVICE  COPYRIGHT 1981
DOW JONES & CO., INC.
NOW AVAILABLE MEDIA GENERAL, INDUS.CO
MPREHENSIVE FINANCIAL
DATABASE, SEE DJNDW
ENTER QUERY
```

When Dow Jones types out "ENTER QUERY," it is ready for you to ask a question. You will use the commands in the following pages to access the information you want. When you are finished using the service, type **DISC** (for disconnect) and press **RETURN**. The service will then print your sign-on and sign-off times, which you can keep for your records. You will receive a monthly descriptive bill from Dow Jones listing all your usage during the month.

Note: Dow Jones Information Services automatically disconnects a user who has not entered any information in over two minutes.

USING DOW JONES INFORMATION SERVICES

We suggest that new subscribers take this tour to familiarize themselves with the kinds of information that are currently in our service. You can start it when our service types "ENTER QUERY."

1. Get the Latest News on a Company

Type . (period) followed by a company code. (Let's use XON which stands for Exxon.) A few company codes are included on page 23 of this guide. All company codes, which are the same as the stock symbols, are in the *Operating Guide and Directory of Symbols* included with the TeleLink I package. Press the **RETURN** key. If the story that prints out isn't finished at the end of the page, press **RETURN** to get the next page. The story you get will be the most recent one in our file.

.XON **RETURN**

2. Get the Headlines on a Company

Type . (period) followed by a company code, then one space, then the number **01** (be sure to type zero rather than the letter O), and press **RETURN**. This will give you the most recent page of headlines, with the most recent headlines first. To get more headlines, press **RETURN**. (Actually, whenever there is more than one page of information, you can get the next page by pressing **RETURN**.)

.XON 01 **RETURN**

3. Pick a Headline That Interests You and Get the Story Behind It

All you need to do is type the two-letter code to the left of the headline you want and press **RETURN**. (In fact, you should press **RETURN** after typing in any information. Our service won't "hear" you until you've pressed **RETURN**.)

DW **RETURN**

4. Get the Headlines in a General Subject Area

Look at the reference card and select a subject area that interest you. Type . (period), the subject code, one space, and **01**. Press **RETURN**.

For general news

.I/GEN 01 **RETURN**

For "hot" business news

.H/ 01 **RETURN**

For today's Dow Jones averages

.I/DJA 01 **RETURN**

For news from the Middle East

.MDEST 01 **RETURN**

5. Get the Current Stock Quote for a Company

Type , (comma) followed by a company code (the same one you would use for news stories—let's use XON again), then press **RETURN**. Note that the period you typed for news stories tells our system to look in the computer's memory area for news. Similarly, the comma tells it to look in the memory area used to store current quotes for stocks. Each memory area in the computer is called a **database**. If the service only gives figures in the Bid/Close and Volume columns, it means the stock hasn't traded in the current day. Therefore, the Bid/ Close figure is the last closing price, and the Volume column shows the date it was last traded.

,XON **RETURN**

6. Get a Month of Stock Quotes for a Company

Type ; (semicolon) followed by a company code (XON), a space, then **P1** for the first "page" of quotes, and press **RETURN**. You will get quotes for the most recent 12 trading days. To get the 12 trading days before that, giving you a complete month, type ; (semicolon), stock symbol, space, **P2**, then press **RETURN**.

;XON P1 **RETURN**

;XON P2 **RETURN**

7. Get Detailed Statistics on a Company

Type \$ (dollar sign) followed by a company code, followed by a / (slash), a **P**, and then press **RETURN**. To get the second page, type **\$2** and press **RETURN**. Repeat for page 3. (This information is supplied to Dow Jones by Media General which has information going back five years.)

\$XON/P **RETURN**

\$1 **RETURN**

\$2 **RETURN**

\$3 **RETURN**

8. Get Historical Stock Quote Summaries for a Company

Type ; (semicolon) followed by a company code (XON), a space, then **78**, **79**, or **80**, depending on which year you want. Press the space bar, and type the letter **Q** if you want quarterly summaries or **M** if you want monthly summaries, then press **RETURN**.

;XON 78 Q **RETURN**

;XON 79 M **RETURN**

;XON 79 Q **RETURN**

;XON 80 M **RETURN**

;XON 80 Q **RETURN**

9. Get the Headlines on an Industry

Type . (period) followed by an industry code (let's use I/PET for the petroleum industry—this and other industry codes are listed on page 27 of this guide), a space, **01**, then **RETURN**.

.I/PET 01 **RETURN**

10. Get Quotes on Bonds, Mutual Funds, or U.S. Treasuries

Follow the formats in the examples here. If the service only gives figures in the Bid/Close and Volume columns, then these figures reflect the last trade price and the date of that trade. Option prices are also available, but require more explanation (see page 15).

For bonds, Dow Chemical 4.35% due 1988

For Dreyfus Special Income Fund

For 8% U.S. Treasury Notes due February 1985

/DOWL RETURN
+DRSPX RETURN
#BAST RETURN

See pages 26, 27 and 28 for a complete list of subject area codes currently available. A complete list of the companies covered is included in the *Operating Guide and Directory of Symbols*. These include companies traded on the New York Stock Exchange as well as those traded on the American, Pacific, and Midwest Exchanges, and stocks traded over-the-counter. It also includes symbols for corporate and foreign bonds, mutual funds, U.S. Treasury issues, and options.

In a Nutshell

1. Connect to the telephone access service (usually Tymnet).
2. Ask for Dow Jones (A DOW1;; DJNS Password).
3. Ask us a question (e.g., .XON 01 RETURN).
4. Ask us more questions.
5. Sign off with (DISC RETURN).

Hints

- Always press RETURN at the end of a query.
- To interrupt: Press and hold SHIFT key while typing ? (question mark). Or if your terminal has a BREAK key, use it.

Note: This works for Tymnet only.

- If you make a mistake, don't worry. Just press RETURN and reenter the line.
- If you get the message SEE YOUR REP, Please hang up and try again.

NOTES

HOW TO GET NEWS

HEADLINES AND NEWS

To get news, always type . (period) followed by the special code for information you want, a space, and the number **01**. Then press **RETURN**. This will produce the first page of headlines. To get the next page of headlines in that subject code, press **RETURN**. Whenever you see a story you want, type the two-letter code to the left of the headline, then **RETURN**.

Request Format

• _____	01	RETURN
subject code		
• _____	01	RETURN
company code		
• _____	01	RETURN
industry code		

To return headlines, type the two-digit number of the headline page you want.

The news file goes back 90 days. The news database has special codes covering **general** news, **economic** news, the **cost of money**, **stock market activity**, **company earnings and dividends**, news on many **industries**, **takeover** news, **commodities** news, **foreign** news, **U.S. Government** news. In addition, it has a code for each of the companies whose stock is traded on the New York Stock Exchange, the American Stock Exchange, the Midwest and Pacific Exchanges, and the OTC (over-the-counter) market.

The company list of subject codes on pages 26, 27, and 28 of this booklet has a few company codes for use in your self-training on the service. The complete list of company codes is in the *Operating Guide and Directory of Symbols*.

NEWS REQUEST EXAMPLES

.XON 01	EXXON headlines
.XON	EXXON latest story
.NAB 01	Nabisco headlines
.G/EXE 01	Executive branch of government, headlines
.H/	Current day "hot" news, latest story

This is your request: the period (.) followed immediately by the symbol for EXXON (XON), then one space, numeral 0, numeral 1 (for the most recent page of headlines) and **RETURN** key.

01/06 indicates number of available pages of headlines. Here 01/06 indicates page 1 of 6 available headline pages.

Company, Industry, Subject, and Federal Agency Codes appear here.

Date story appeared

Source Code. e.g.,
D or DJ- Dow Jones News Wire.
W or WSJ- Wall Street Journal.
BAR-Barron's.

Story Identifier Code

You want this story.

You ask for the story to be printed out, interrupting the headline printout by holding down the **SHIFT** key and typing ? (question mark), then by typing the two-letter code found at the left of each headline and pressing the **RETURN** key.

```

XON 01
N XON 01/06
CM 08/21 SHARON - UV INDUSTRIES -2-
(D-W)
CM 08/21 SHARON-UV INDUSTRIES POSTPONE
(D-W) $518 MILLION EXCHANGE OFFER
CL 08/21 FLUOR UNIT TO STUDY EXXON'S
(DJ) FUTURE INVESTMENTS IN ALASKA
CK 08/13 WASHINGTON'S OIL WATCHDOG
(W5J) MAY BE TRAPPED BY VAGUE RULES
CJ 08/08 AIR PRODUCTS & CHEMICALS GETS
(D-W) NITROGEN GAS PACT FROM EXXON
CI 08/08 EXXON SAYS MATHIS TO SUCCEED
(W5J) DAVID AS VICE PRES OF ARM
CH 08/07 ARAMCO EXPANDS
(W5J) ITS BOARD
CG 08/06 COLUMBIA GAS CANADA WELL
(D-W) FLOWS AT 'EXCELLENT' RATE

```

Sample of Headlines for EXXON Corporation.

Story requested

Story Identifier Code and Story Length Indicator. This is page 1 of a 2-page story.

Headline

Source of story

Text of story

```

CJ
N XON 01/06 CJ 1/2
/APP XON /PET
07/08 AIR PRODUCTS & CHEMICALS GETS
(D-W) NITROGEN GAS PACT FROM EXXON
ALLENTOWN PA -DJ- AIR PRODUCTS &
CHEMICALS INC SAID IT RECEIVED A
CONTRACT TO SUPPLY GASEOUS NITROGEN
FOR AN ENHANCED OIL RECOVERY PROJECT
IN THE JAY OIL FIELD IN THE FLORIDA
PANHANDLE.
THE COMPANY DECLINED TO DISCLOSE THE
VALUE OF THE CONTRACT.
AIR PRODUCTS SAID IT SIGNED THE
CONTRACT WITH EXXON CO USA WHICH IS
ACTING ON BEHALF OF THE JAY-RITTLE
ESCAMBIA CREEK UNIT WORKING INTEREST
OWNERS TO SUPPLY 70 MILLION STANDARD
CUBIC FEET PER DAY OF HIGH-PURITY
PRODUCT TO THE FIELD.

```

Sample News Story for EXXON. This is story "CJ," one of those listed on the headline page.

Second page of story

N XOM 01/06 CJ 2/2
THE PROJECT IS EXPECTED TO INCREASE
ULTIMATE PRODUCTION BY ABOUT 50
MILLION BARRELS OF OIL AIR PRODUCTS
SAID.
THE FIELD CURRENTLY PRODUCES ABOUT
90000 BARRELS OF OIL PER DAY.
THE GASEOUS NITROGEN WILL BE SUPPLIED
FROM AIR PRODUCT'S CYROGENIC NITROGEN
FACILITY THE FIRST UNIT OF WHICH IS
SCHEDULED FOR COMPLETION LATE NEXT
YEAR IN FLOMATON ALABAMA. 9 53 AM

Time story was filed

NOTES

HOW TO GET MARKET QUOTES

QUOTES

To get quotes always type the appropriate database code (, / - + #), followed by the code for the security whose quote you want, then press **RETURN**. See request formats 1 through 5. Quotes reflect stock exchange trades as they occur with the minimum 15-minute delay established by the exchanges.

If the service only shows figures in the Bid/Close and Volume columns, then the stock hasn't yet traded on the current day, and the first figure gives the latest close price while the second figure gives the date of the last trade (that is 1203 would mean December 3).

Request Formats

1 ,	_____	RETURN
	stock code	
2 /	_____	RETURN
	bond code	
3 -	_____	RETURN
	options code	
4 +	_____	RETURN
	mutual fund code	
5 #	_____	RETURN
	US Treasury code	

SPECIAL NOTES FOR COMMON STOCKS

To access a quote from a specific stock exchange, not the composite, first type in the number of the exchange and then the stock symbol. No number is needed for over-the-counter (OTC) quotes. 1 = New York, 2 = American, 3 = Pacific, 4 = Midwest.

To access preferred stocks type + (plus) after entering the symbol. For warrants, type % (percent) after entering the symbol. For when-issued stocks, type an @ after entering the symbol if it is traded on the New York or American Stock Exchanges. For NASDAQ over-the-counter stocks, add a V after the symbol. For example:

EXXON (NYSE): ,XON@

Anheuser-Busch (OTC): , BUDV

INFORMATION INCLUDED IN THE QUOTE SERVICE

Price information is updated continuously as trades occur on the exchanges, with the minimum 15-minute delay established by them. Quotes are available for:

- Common and preferred stocks and warrants on four U.S. stock exchanges: New York, American, Pacific, and Midwest. Subscribers can access both composite price and individual exchange prices. Quotes include previous day's close, opening price, high, low, latest price, and volume. If a stock is not yet traded the Close column reflects its last traded price, and the Volume column reflects the date of that trade.

- Corporate and foreign bonds on three exchanges: New York, American, and Pacific. The volume figure reflects the value of the bonds traded. If it is not yet traded the Close column reflects its last trade price, and the Volume column reflects the date of that trade.
- Options from five exchanges: Chicago Board Options Exchange, the American, Pacific, Midwest, and Philadelphia Stock Exchanges. Volume reflects the number of contracts traded. If it is not yet traded, the Close column reflects its last traded price and the Volume column reflects the date of that trade.

Quotes are also available for:

- The national NASDAQ OTC market with bid and ask prices updated six times each day, on the hour, between 11 a.m. and 5 p.m. Eastern time. Volume is updated once each business day at approximately 6 p.m. Eastern time.
- Mutual fund sell (net asset value) and buy (markup) quotes are updated once each day at approximately 6 p.m. Eastern time. Before that, only the net asset value and the date of the last trade are given.
- Selected U.S. Treasury issues are updated each day at 6 p.m. Eastern time with bid, ask, and yield. Government bonds are traded in 30 seconds, and the point in a quote is a device to separate the round figures from the fraction; 99.16 is 99 and 16/32.

CURRENT DAY QUOTE REQUEST SAMPLES

Database	Market Quote Request	Request Format
Stocks	EXXON (composite)	,XON
Stocks	EXXON (NYSE)	,1XON
Corporate Bonds	Ashland Oil 6.15% 1992	/ASHK
Mutual Funds	Capital Bond	+ AGCBX
U.S. Treasury Notes and Bonds	9 5/8% Aug., 1981 Notes	#BAMB
Options	EXXON, \$55 July 1981 Options	-XONGP

OPTIONS SYMBOLS FORMULA

To access the options database, type in a - (small hyphen) and enter the stock symbol (do not put a space in between). See your newspaper for option months and strike prices. Add the one-letter month code and the one-letter strike price code. Press **RETURN**. Strikes adjusted for stock splits may use a different primary symbol, for example, **-XONCD**.

Month Codes

	Call	Put
JAN	A	M
FEB	B	N
MAR	C	O
APR	D	P
MAY	E	Q
JUN	F	R
JUL	G	S
AUG	H	T
SEP	I	U
OCT	J	V
NOV	K	W
DEC	L	X

Strike (exercise) Price Codes

\$ 5	A	\$ 55	K
10	B	60	L
15	C	65	M
20	D	70	N
25	E	75	O
30	F	80	P
35	G	85	Q
40	H	90	R
45	I	95	S
50	J	100	T

Letters U through Z for nonstandard strikes and fractionally adjusted prices.

Stock Quote

```

DOW JONES STOCK
QUOTE REPORTER SERVICE
STOCK QUOTES DELAYED
OVER 15 MINUTES
* = CLOSE ADJ. FOR EX-DIVIDEND

STOCK          HONGP
BID/CLOSE      8 1/2
ASKED/OPEN     11
HIGH           11
LOW            11
LAST           11
VOLUME (100'S) 5
  
```

EXXON Option July \$80

**U.S. Treasury
Quote**

DOW JONES STOCK
QUOTE REPORTER SERVICE
STOCK QUOTES DELAYED
OVER 15 MINUTES
*=CLOSE ADJ. FOR EX-DIVIDEND

STOCK	BAMB
BID	95.07
ASKED	95.11
YIELD	16.92

*U.S. Treasury Notes, 9- 5/8%
due August 1981*

HOW TO GET HISTORICAL QUOTES

HISTORICAL QUOTES

Historical quotes go back through 1978. To get daily quotes for the most recent 12 trading days, use format 1. For the preceding 12 days, use format 2.

For monthly quote summaries, use request format 3, being sure to type ; (semicolon), the stock code, space, the year code **79** for 1979, **80** for 1980), a space, the letter **M**, and **RETURN**. For quarterly quote summaries, use the same sequence as above but type **Q** instead of **M**. See request format 4.

Request Formats

1 ;	_____	P1	RETURN
	stock code		
2 ;	_____	P2	RETURN
	stock code		
3 ;	_____	M	RETURN
	stock code	year code	
4 ;	_____	Q	RETURN
	stock code	year code	

Historical quotes are available for common and preferred stocks and warrants on four U.S. exchanges: New York, American, Midwest, and Pacific—and the national OTC market. There are no composite quotes at this time. Quarterly summaries start in 1978; quarterly and monthly summaries are available from 1979 to the present. The latest 24 business days are also in the database.

High, low, close, and volume figures are provided for the New York and American Stock Exchanges. Over-the-counter quarterly and monthly summaries provide bid and ask. Both give volume.

GETTING QUOTES

1. Type ; (semicolon) to indicate historical quote database.
2. Type in the number of the exchange and the stock symbol (no number is needed for OTC quotes): **1** = New York, **2** = American, **3** = Pacific, **4** = Midwest.
3. To retrieve daily quotes for most recent month: Press **SPACE BAR**, and type **P1** for most recent 12 business days or **P2** for days 13-24. Press **RETURN**.
4. To retrieve quarterly or monthly summaries: type ; (semicolon), then the stock symbol. Then press **SPACE BAR** and type last two digits of the appropriate year (for example **78**, **79**, or **80**). Press **SPACE BAR** again and type **Q** for quarterly summaries or **M** for monthly summaries. Press **RETURN**.

HISTORICAL STOCK QUOTE REQUEST SAMPLES

Time Period	Exchange	Request Format
1978 Quarterly	New York	;1XON 78 Q
	Pacific	;3XON 78 Q
	Midwest	;4XON 78 Q
1979 Quarterly	New York	;1XON 79 Q
	Pacific	;3XON 79 Q
	Midwest	;4XON 79 Q
1979 Monthly	New York	;1XON 79 M
	Pacific	;3XON 79 M
Most recent 12 days	Midwest	;4XON P1
Previous 13-24 days	New York	;1XON P2

DOW JONES HISTORICAL STOCK QUOTE REPORTER SERVICE

STOCK 1WCI

	1980 HIGH	QUARTERLY LOW	SUMMARY CLOSE	VOL(100/5)
FIRST	40 1/2	37 3/4	38 7/8	556
SECOND	46 1/2	36 1/2	42 1/2	35683
THIRD	62 3/4	41 7/8	54 3/8	42377
FOURTH	81 1/2	54 3/4	77 5/8	29543

* THE ABOVE FIGURES REFLECT A NEW
ISSUE AS OF 03/31/80

Warner Communications, Inc.
Historical Summary

HOW TO GET DETAILED FINANCIAL STATISTICS

(Data Provided by Media General Financial Services, Inc.)

FINANCIAL STATISTICS

To get stock performance statistics on a company traded on the New York Stock Exchange, the American Stock Exchange, or for 800 companies whose stock is traded over-the-counter, type **\$** (dollar sign), followed by the company code (the same one as for new and stock quotes), **/** (slash), the letter **P**, and press **RETURN**. This information is on three pages. Type **\$1**, **2**, and **3** to get the three pages of information. See request format 1.

Request Format 1.

\$ _____ **/P** **RETURN**
 (company or industry code) **\$1** **RETURN**
 \$2 **RETURN**
 \$3 **RETURN**

To get company sales, earnings, and other information, use the same sequence as above but type **F** instead of **P**. See request format 2.

Request Format 2.

\$ _____ **/F** **RETURN**
 (company or industry code) **\$1** **RETURN**
 \$2 **RETURN**
 \$3 **RETURN**

The same information is also available for 180 industry groups. These industry codes are sent automatically to all new subscribers.

Financial statistics are supplied to Dow Jones by Media General Financial Services, Inc. They include information on earnings, dividends, price-earnings ratios, and stock-price performance relative to market indicators for companies listed on the New York and American stock exchanges and for 800 selected over-the-counter companies. They also include composite information on 180 industries according to various financial indicators specified by the user. Information is updated weekly by Media General.

STOCK PRICE AND VOLUME

- Price vs last trading week, 4 weeks, 13 weeks, 52 weeks, year -to-date.
- Price change vs Standard and Poor's 500 stock index, same periods.
- Price range for the last year and the last 5 years.
- Price-earnings ratios—current, 5-year average, high and low.
- Price relative to common equity, revenue per share, and relative price index.
- Price action— gain index and beta factor.
- Share volume traded in latest week—in shares, dollars, and percent of shares outstanding. Also liquidity ratio and on-balance index.

FUNDAMENTAL DATA

- Revenue for last year, and change vs last quarter and year-to-date.
- Earnings—total 1 year; per share for last 12 months, last fiscal year; percent change for last quarter, fiscal year to date, and last 12 months; 5-year growth rate.
- Dividends—current amount and percent yield, 5-year growth rate, payout for last fiscal year and last 5 years, last ex-dividend date.
- Financial ratios—profit margin percent, return on common equity and total assets, revenue to assets, debt to equity, interest coverage, and the current ratio.
- Shareholdings—market value, shares outstanding, shares held by institutions, insider net trading, and the short interest ratio.
- Date fiscal year ends.

```
EXXON CORPORATION (070)
- PRICE AND VOLUME - 12/12/80

PRICE CHANGE (1)
-- LAST TRADING WEEK -1.7%
-- LAST 4 WEEKS -4.8%
-- LAST 13 WEEKS 12.1%
-- LAST 52 WEEKS 39.7%
-- YEAR TO DATE 42.9%

CHANGE VS. S & P 500
-- LAST TRADING WEEK 102%
-- LAST 4 WEEKS 101%
-- LAST 13 WEEKS 109%
-- LAST 52 WEEKS 118%
-- YEAR TO DATE 119%
```

EXXON CORPORATION
- FUNDAMENTAL DATA - 12/12/80 (070)
REVENUE (1)
-- LAST 12 MONTHS \$100,580 MIL
-- LAST FISCAL YEAR \$79,107 MIL
-- PCT CHANGE LAST QTR 23.1%
-- PCT CHANGE YEAR TO DATE 36.3%
EARNINGS-LAST 12 MOS \$5,675.2N MIL
EARNINGS PER SHARE
-- LAST 12 MONTHS \$12.99
-- LAST FISCAL YR \$9.74
-- PCT CHANGE LAST QTR 20.4%
-- PCT CHANGE FY TO DATE 48.9%
-- PCT CHANGE LAST 12 MONTHS 51.8%
-- FIVE YR GROWTH RATE 19.8%

Financial Statistics

NOTES

SAMPLE CODES FROM DIRECTORY OF SYMBOLS

COMMON STOCKS: SAMPLE CODES

Database Codes:

News	. (period)
Current Quotes	, (comma)
Financial Statistics	\$ (dollar sign)

Company Symbol

AT & T	T
General Motors	GM
Sears	S
Warner Communications	WCI

CORPORATE BONDS: SAMPLE CODES

Database Code: / (slash)

Security	Exchange	Symbol
Clark Equip. Co. 9 5/8% 1999	NY	CKLD
Dow Chemical 4.35% 1988	NY	DOWL
NCR 9% 1985	NY	NCRE

MUTUAL FUNDS: SAMPLE CODES

Database Code: + (plus)

Fund Name	Symbol
Capital Bond	AGCBX
Janus Fund	JANSX

U.S. TREASURY BONDS AND NOTES: SAMPLE CODES

Database Code: # (number)

Rate	Name	Symbol
8 7/8%	June 1983 Notes	BAQR
4%	February 1988-93	BFCA

NOTES

OPERATING INFORMATION

HOW TO PRINT INFORMATION

The TeleLink I cartridge allows you to print any information that comes across your screen. The ATARI computer sees that information as characters that can be stored in its "buffer," a section of the computer's memory reserved for incoming characters. Up to 1000 characters can be collected in the buffer at one time and then sent to the printer. For detailed instructions, refer to the appropriate printer operating manual and the TeleLink manual.

PRINTING EVERYTHING

The TeleLink I cartridge requires no special commands to print everything coming across your screen. When the buffer is full, the cartridge stops accepting incoming characters, the screen freezes, and the printer prints the contents of the buffer. The screen is then reactivated until the next thousand characters are received. This is called AUTOMATIC PRINT MODE.

PRINTING SOME THINGS

Hold down the **CTRL** (control) key and type **9**. The computer responds with NON-AUTOMATIC MODE WITH NO START/STOP. (To return to AUTOMATIC PRINT MODE type **CTRL 9** again). When you decide to print something, press the **START** key on the right side of the keyboard. This begins accumulating characters in the buffer. Next get the information you want by using the standard Dow Jones News/Retrieval commands. The information is stored in the buffer until you press the **OPTION** key. Pressing **OPTION** prints the contents of the buffer.

The Clicking Sound

If you hear a clicking noise, the buffer is full or almost full.

- All characters received after the clicking noise will not be saved in the buffer.
- Characters received after the clicking noise displace characters sent earlier in the transmission.
- Once you hear the clicking noise, you should print the contents of the buffer before you begin to lose characters.

COMPLETE SUBJECT AREA CODES

Request format: . _____ 01 RETURN
subject code

General News

General News	I/GEN
Hot Business News	H/
Headlines of the Hour	I/HOH
New York News	NYORK
All	A/

Economic News

The Economy	I/ECO
Economic Indicators	I/EMI

Cost of Money

Monetary News	I/MON
Bond Market News	I/BON

Stock Market Activity and Company Earnings, Dividends, and Takeover News

Daily Calendar	I/CAL
Active Stocks	I/ACT
Stock Market	I/STK
Tender Offers, Mergers, Acquisitions	I/TNM
Bankruptcies	I/BCY
Block Trades	I/BLK
Buybacks	I/BBK
Dow Jones Averages	I/DJA
Barron's News	BRRNS
Earnings Reports	I/ERN
Dividend Actions	I/DIV
Labor	LABOR
Executive Changes	WNEWS
Stock Symbol Changes	BRSYM

Commodities News

Commodities	I/CML
-------------	-------

Foreign Area News

General Foreign News	FORGN
Canada	CANDA
Latin America	LATAM
Europe	EUROP
Japan	JAPAN
Far East	FREST
Mideast	MDEST
Africa	AFRIC

U.S. Government News

General Government News	GOVMT
Executive Branch News	G/EXE
Congressional News	G/CNG
Supreme Court	G/SUP
Agriculture Department	G/AGD
Justice Department	G/JUS
Civil Aeronautics Board	G/CAB
Defense Department	G/DEF
Energy Department	G/ERG
Internal Revenue Service	G/IRS
Taxes	TAXES

Banking Regulatory Agencies

Federal Reserve Board	G/FED
Treasury Department	G/TRE

Federal Regulatory Agencies

Environmental Protection Agency	G/EPA
Federal Communications Commission	G/FCC
Food and Drug Administration	G/FDA
Federal Trade Commission	G/FTC
Interstate Commerce Commission	G/ICC
Securities and Exchange Commission	G/SEC

Industries

Accounting	I/FIN
Advertising	I/COM
Aerospace	I/ARO
Airlines	I/AIR
Appliances	I/ELE
Autos, Auto Parts	I/AUT
Banks	I/BNK
Broadcasting	I/COM
Chemicals	I/CHM
Computers	I/OFF
Construction (Also Materials)	I/CON
Cosmetics	I/FAB
Electric and Electronics	I/ELE
Farm Equipment	I/FAR
Farm Products	I/CMD
Financial	I/FIN
Food and Beverage	I/FAB
Food Stores	I/RET
Hospital Supplies	I/PHA
Household Products	I/FAB

Industrial Equipment	I/IND
Insurance	I/FIN
Land Development	I/REL
Leasing	I/FIN
Machine Tools	I/IND
Mining and Metals	I/MIN
Movies	I/COM
Mutual Funds	I/FIN
Natural Gas and Pipelines	I/LNG
Nuclear Power, Fuel, etc.	I/NUK
Office Equipment	I/OFF
Paper	I/PUL
Packaging	I/PUL
Petrochemicals	I/CHM
Petroleum	I/PET
Pharmaceuticals	I/PHA
Plastics	I/CHM
Publishing	I/COM
Pulp and Paper	I/PUL
Railways	I/TRA
Real Estate (REITS)	I/REL
Restaurants	I/FAB
Retailing	I/RET
Rubber	I/RUB
Securities Industry	I/SCR
Ship Lines, Builders	I/TRA
Supermarkets	I/FAB
Telephone, Telegraph	I/UTI
Textiles and Apparel	I/TEX
Thrift Institutions	I/BNK
Tobacco	I/FAB
Transportation (Not Airlines)	I/TRA
Truck Lines	I/TRA
Utilities	I/UTI

USER INFORMATION

Telephone Network Number _____
 Alternate Network Number _____
 Dow Jones Password (confidential) _____

Dow Jones Codes Frequently Used

[illegible]

RATES AND HOURS OF OPERATION

When you use Dow Jones Information Services you will be billed at the end of the month by Dow Jones at rates in effect at that time. Communications costs of networks like Tymnet or Telenet are included as part of Dow Jones' regular rates.

There are no extra charges for printing copies of documents retrieved.

Usage Rates of Dow Jones Information Services as of January 1, 1981 are:

Database	Daytime Hours Cost/Minute	Leisure Hours Cost/Minute
News	\$1.00	\$.20
Quotes	.75	.15
Media General	1.00	1.00

Hours of Operation Monday-Friday

Time Zone	Daytime Hours	Leisure Hours
Eastern	6:00 a.m. - 8:00 p.m.	8:01 p.m. - 3:00 a.m.
Central	5:00 a.m. - 8:00 p.m.	8:01 p.m. - 2:00 a.m.
Mountain	4:00 a.m. - 8:00 p.m.	8:01 p.m. - 1:00 a.m.
Pacific	3:00 a.m. - 8:00 p.m.	8:01 p.m. - Midnight

Hours of Operation - Weekends and Holidays*

Time Zone	Leisure Hours
Eastern	7:00 a.m. - 3:00 a.m.
Central	6:00 a.m. - 2:00 a.m.
Mountain	5:00 a.m. - 1:00 a.m.
Pacific	4:00 a.m. - Midnight

* All weekends and holidays are billed at the leisure hours rates. The holidays are: New Year's, Washington's Birthday, Memorial Day, Independence Day, Thanksgiving, and Christmas.

Notes:

- Users will be notified of new databases and their applicable rates on a regular basis. Rates are subject to change without notice.
- Initial introductory time is to be used during leisure hours after 8:00 p.m. your local time.
- Beginning July 1, 1981 leisure hours Monday through Friday will start at 6:01 p.m. local time.

HOW TO USE TELENET

- Telenet will connect with Dow Jones between 6:00 a.m. and 6:00 p.m. Eastern Standard Time, Monday through Friday excluding holidays.
- The **BREAK** Key: The question mark does **not** interrupt a headline or story printout under Telenet.
- The Telenet Sign-On Procedure:
 1. Once the phone is in the modem, press **RETURN** twice.
 2. Telenet responds with Telenet system information, and asks you to identify your terminal. When you see **TERMINAL**, then press **RETURN**.
 3. Telenet then prompts you with an **@**. Type **C**, a space, and **60942**. You are saying to Telenet, "Connect (**C**) with the Dow Jones network address (60942)."
 4. The remainder of the sign-on is like the Tymnet sign-on. You answer "What service please???" with **DJNS** and press **RETURN**. Then enter your 10-character password.

[illegible]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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