

*National Association
of Securities Dealers, Inc.*

*1981
Annual Report*

NASD
1981

About the NASD

The National Association of Securities Dealers, Inc. (NASD), is the nonprofit, self-regulatory organization for the over-the-counter market. Through its subsidiary, NASDAQ, Inc., it owns and operates the nationwide, electronic NASDAQ system, which serves the fastest-growing and second-largest securities market in the United States. Working closely with the Securities and Exchange Commission, the NASD sets the standards for NASDAQ securities and market makers and provides ongoing surveillance of trading activities. The NASD also provides key services for its membership and NASDAQ companies, particularly through its cooperative efforts with governmental and other agencies on policies and legislation which affect the investment banking and securities business.

A total of 3,265 broker/dealer firms, including nearly all members of stock exchanges doing a public business, belong to NASD and agree to abide by its rules as a condition of membership. Some 220,000 registered representatives of these organizations are subject to NASD regulation. As a regulatory organization whose activities are geared to protect investors and to promote fair business practices, the NASD determines the compliance of brokers and dealers with governmental regulations and its own Rules of Fair Practice.

Table of Contents

1	Highlights
2	Chairman's and President's Report
4	The NASDAQ System
5	Essay: NASDAQ Comes of Age
10	Operating Review
24	NASD Officers and Board of Governors
26	National Committees
28	District Committees
32	Financial Statements

Highlights of the Year

- A \$15 million program to upgrade the NASDAQ system is substantially completed.
- NASD prepares for the 1982 start-up of the National Market System.
- Pilot operations begin for the Computer Assisted Execution System.
- The number of securities in the NASDAQ system shows a net increase of 637, the largest annual gain in its 10-year history.
- NASDAQ trading volume jumps 17 percent to a record 7.8 billion shares, more than twice the 1979 level.
- The Market Information Data Access System is implemented to bolster NASD's already strong market surveillance capabilities.
- The NASDAQ National List and the 10 Most Active List are restructured to provide higher visibility to NASDAQ companies with substantial public float, equity, earnings and market value.
- NASD membership rises 11 percent and the number of registered representatives increases 12 percent, reflecting the acceleration of recent growth trends.
- The Central Registration Depository streamlines the application and licensing of registered representatives in 20 states at year-end, with 12 more scheduled to join in 1982.
- The number of investors who own over-the-counter securities reaches 10 million—almost double the 1975 figure—reflecting burgeoning investor interest.

To Our Members, Issuers and Friends

We are pleased to report that 1981 was another year of dynamic growth and continuing maturation for NASD, NASDAQ and the over-the-counter market. NASD's role as a self-regulatory organization with broad oversight responsibilities in the securities industry also spurred increasing activity on several fronts. These parallel developments reflect NASD's continuing commitment to meet the dual challenges of operating and regulating the country's fastest-growing and second-largest securities market at a time of radical change in the structure and delivery of financial services.

The year 1981 marked the 10th anniversary of NASDAQ, a milestone that we have saluted with a special section beginning on page 4 of this report. During a single decade, NASDAQ transformed what was previously a backwater of the securities industry—and has begun, in many ways, to establish itself as a prototype of the stock market of the future.

With the phased introduction of the National Market System in 1982, the stature of hundreds of NASDAQ securities will be enhanced by virtue of both the quality and timeliness of information available to investors. Last-sale information will be continuously displayed on some 70,000 terminals around the world, and daily newspaper stock tables will show volume and

high, low and closing prices. At the same time, NASDAQ companies will continue to benefit from the unique advantages of the competitive multiple-market-maker system.

In preparation for NASDAQ's second decade, NASD completed a number of major projects in 1981 that we believe will provide the underpinnings to support future growth and development. Four of these efforts deserve special mention here, not only because they represent significant advances in key areas for NASD, but also because initial problems were overcome through hard work and close cooperation among many people.

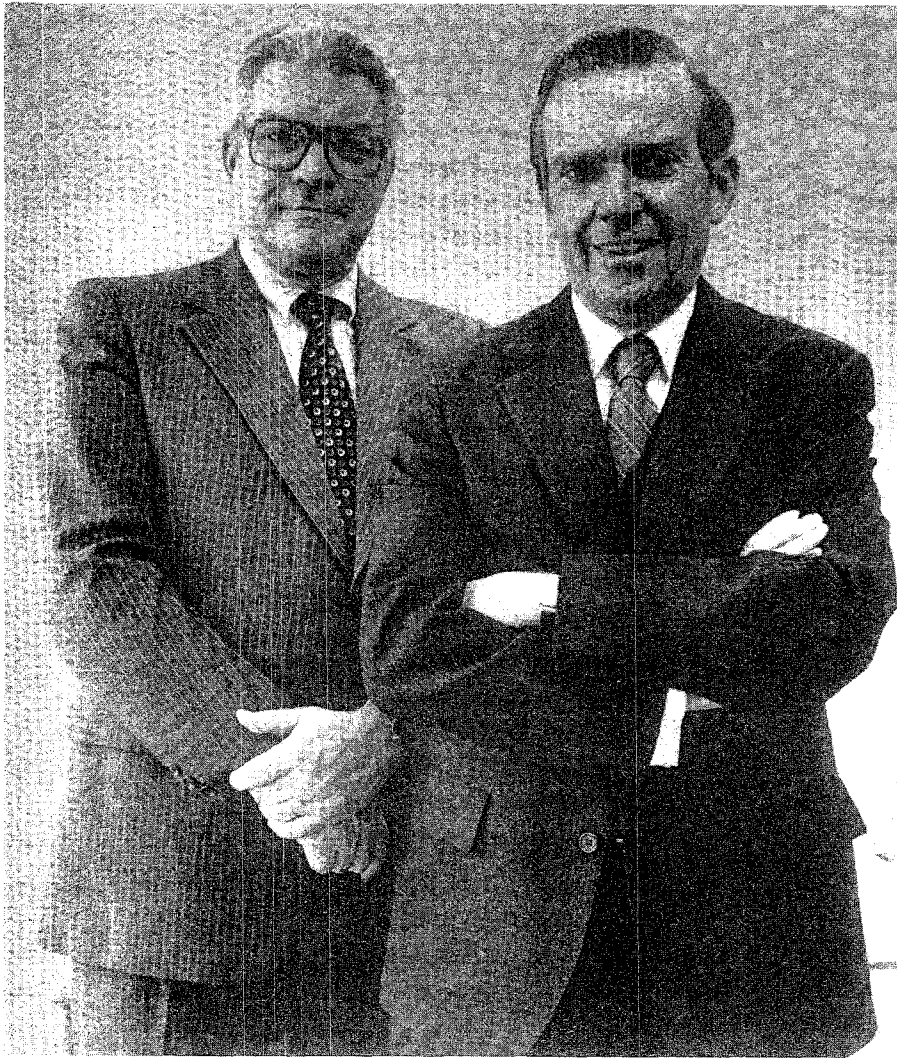
First, the \$15 million program begun last year to replace the hardware at the heart of the NASDAQ system with state-of-the-art equipment was substantially completed in 1981. Powerful new central computers with twice the speed and three times the memory of the previous unit were installed at NASDAQ's central processing complex in Trumbull, Connecticut. In addition, 1,725 programmable new terminals with eight times the display capability of an earlier generation of terminals were installed in trading rooms and other locations across the country. NASD personnel worked long and hard in collaboration with users and the manufacturer to overcome nagging start-up problems that are endemic to pioneering technical efforts of this kind.

Second, the computerized Market Information Data Access System (MIDAS) has been installed to bolster

NASD's already strong market surveillance. MIDAS provides on-line access to the previous 60 days of market data for all NASDAQ securities. NASD analysts can now instantly reconstruct unusual trading patterns as they occurred—and create a complete audit trail of quotation activity for all market makers. This new tool is already helping NASD intensify its efforts to build insider-trading cases and document other manipulative activities for referral to the SEC (see page 15).

A third major effort that bore fruit in 1981 was the Central Registration Depository (CRD), a computerized system designed to streamline the application and licensing procedure for registered representatives. The concept behind CRD is elegantly simple, but its implementation, coming as it did during an unprecedented surge in the number of applications being filed, posed difficult technical and operational problems that are in the process of being resolved. The basic idea is to enable a broker/dealer to submit a single form with a single check to generate multiple registrations and licenses—thus eliminating the cost and paperwork of separate, identical filings with dozens of states and self-regulatory organizations. The system served 20 states at year-end, with 12 more scheduled to join in 1982.

The fourth project was the restructuring of the NASDAQ National List to



NASD Chairman L.C. Petersen (left) with President Gordon S. Macklin.

increase continuity and provide a more uniform basis of comparison among the three major newspaper stock tables, in preparation for the advent of the National Market System. We believe the new approach will serve investors and issuers more effectively in a changing market environment.

The National List is now based on financial criteria rather than the previous dollar volume requirements. In addition, the yardstick for the 10 Most Active List has been changed from share volume to dollar volume. The result of both moves is that NASDAQ companies with substantial public float, equity, earnings and market value will receive the higher visibility they deserve.

Signs of the vitality of NASD and its areas of involvement abounded in 1981. Particularly encouraging was NASDAQ's extraordinary net increase of 637 issues in a year when the NYSE and the AMEX both showed declines. At year-end, NASDAQ included almost 3,700 issues, as compared with a combined total of less than 3,200 on those exchanges.

The number of new member broker/dealers also rose significantly. Total membership in the NASD at year-end was 3,265 firms, up 11 percent from a year ago. The number of registered representatives also increased in 1981 to some 220,000, up 12 percent in the

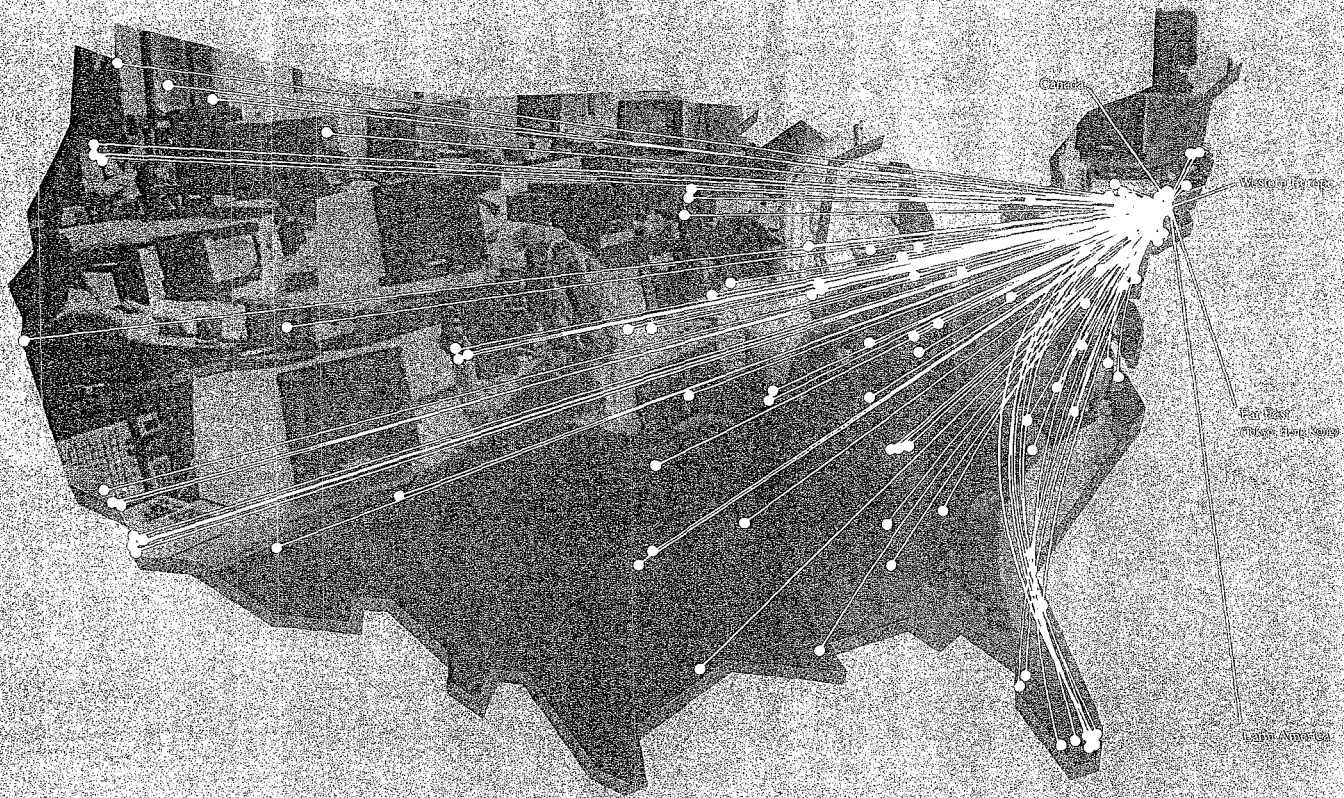
year. As test administrator for the securities industry, NASD administered over 100,000 qualification examinations during 1981 for itself, other self-regulatory organizations, the states, the SEC and commodity exchanges. This is a 67 percent increase over 1980.

Although 1981 was one of the most significant and successful years in NASD's 42-year history, we believe 1982 could well be the most important single year in the history of the over-the-counter market. The start-up of the National Market System will transform NASDAQ at a time when our financial markets are experiencing rapid structural change. It is an exciting and challenging time for NASD. We face the future with confidence, relying on the continuing commitment of the hundreds of executives whose dedicated and effective participation in the NASD's various Committees has contributed mightily to the advancement of the industry.

Sincerely,

L.C. Petersen
Chairman

Gordon S. Macklin
President



The NASDAQ System

NASDAQ, an acronym for National Association of Securities Dealers Automated Quotations, is a highly sophisticated, computerized communications system which stores and transmits up-to-the-second price quotations for nearly 3,700 domestic and foreign securities. In order to be quoted on NASDAQ, issuers of common and preferred stock, warrants, convertible debentures and other securities must meet the financial requirements of this electronic system.

Through the NASDAQ system, some 3,300 broker/dealer firms, as well as professional traders and investors, have immediate access to the quotations of all dealers who make

markets. There are more than seven market makers competing with each other to buy and sell the typical NASDAQ security.

At the heart of NASDAQ are two powerful central computers in Trumbull, Connecticut, and 1,725 sophisticated terminals in the offices of market makers, financial institutions and other subscribers throughout the country. The terminals display the quotations for all NASDAQ securities, which are entered and updated by market makers during the course of a trading day. The system automatically identifies the market makers with the best prices. Individual brokers have access to the best bid and asked prices through some 70,000 desk-top terminals in the United States and abroad.

The system constantly calculates NASDAQ indices during the day—and at the end of the day, volume and closing bid and asked prices are released to the wire services for transmission to newspapers. On a typical day, trading volume for NASDAQ securities can range anywhere from 28 to 36 million shares. The NASDAQ National List of some 1,800 securities is published in 76 newspapers across the country, representing a combined circulation of 100 million readers, and abbreviated versions of the National List and lists of NASDAQ stocks of local interest are published in another 170 papers.

NASDAQ Comes of Age

Just entering its second decade, NASDAQ has nonetheless come of age. Once the acknowledged spawning ground for the stock exchanges, NASDAQ is no longer a "junior" market where little companies grow up until they are ready for an exchange listing. Today, NASDAQ's National List of more than 1,800 securities is composed mostly of seasoned market performers—companies that stay on NASDAQ because they'd rather have competitive market makers than a single exchange specialist. The quality and performance of these companies, and the investor following they have attracted, have made NASDAQ the fastest-growing and second-largest securities market in the U.S.

Now, NASDAQ is poised for another giant step forward with the 1982 start-up of the long-awaited National Market System. NMS will significantly expand the trading information that is available on NASDAQ securities. It will also provide a trading link between off-board market makers and exchange floors. NMS promises to be equally as important to the evolution of securities markets as was NASDAQ's debut in 1971.

In a single decade, NASDAQ has brought order to what had been a largely unrecognized and sometimes chaotic market and, in the process,

February 17, 1981, was proclaimed "NASDAQ Day" by New York Mayor Edward I. Koch, in honor of NASDAQ's 10th anniversary. Gordon S. Macklin, president of NASD, shows the official proclamation at a press conference marking NASDAQ's first decade.



completely transformed the nature of over-the-counter trading. Today's strong and rapidly growing NASDAQ system—an efficient, liquid and visible market, where activity is subject to computerized surveillance and many stocks are those of emerging blue chip companies—contrasts sharply with the over-the-counter market before 1971.

Before NASDAQ came on the scene, up-to-the-minute quotations for OTC securities were elusive. Messengers scrambled to deliver multicolored sheets with quotations that were hours, or even days, old. For a more recent quote, a broker had to contact a market maker by telephone or telegraph. Shopping for the best quotation among the various

market makers was practical only for large orders. Small wonder, then, that promising companies fled the OTC market for the relative calm and organization of the exchanges.

The climate began to change when NASDAQ began operations as a trailblazer of the electronics age a decade ago. NASDAQ's electronic flow of up-to-the-second price quotations throughout the trading day created a vital communications link between the market makers, brokers and investors. It also brought the market its first real public visibility.

The system started with quotation information only but was soon expanded to include other trading information that in the past had been largely unavailable. Volume information was added during the system's first year, as was a running index of NASDAQ stock performance. Other innovations—such as the best bid and asked prices (known as "inside quotations")—were added later.

The NASD will institute still more enhancements of the OTC market in 1982, including the Computer Assisted Execution System and display of the size as well as the price of dealer quotations on NASDAQ. The NASD will continue to innovate as dictated by industry needs and continued technological advances.

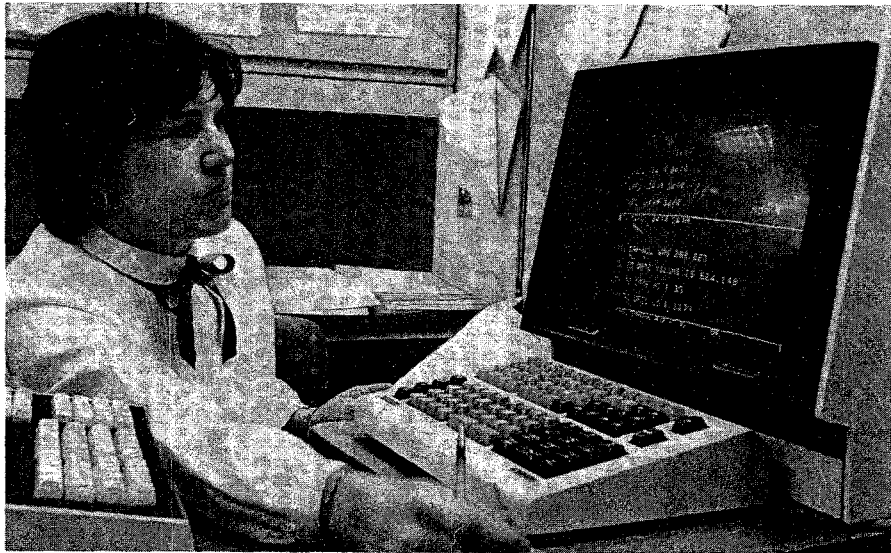
Until NASDAQ, many investors had considered the over-the-counter market a moribund backwater of the securities industry. The initial

statistics gathered by NASDAQ's computers were surprising to the skeptics. During 1972, NASDAQ's first full year, 2.2 billion shares were traded. By 1981, NASDAQ volume had surged to a record 7.8 billion shares, up 17 percent over the previous year and more than twice the level of 1979. This performance contrasted sharply with the 5 percent 1981 increase in New York Stock Exchange share volume and the 17 percent decline on the American Stock Exchange. NASDAQ share volume is now two-thirds of the NYSE total and almost six times that of the AMEX.

Growth of this magnitude reflects burgeoning investor interest and increased confidence in over-the-counter securities. A record total of 10 million shareholders now own OTC securities, virtually double the number in 1975. Recent statistics show that the number of investors who hold OTC securities is continuing to grow at a much more rapid pace than ownership of exchange-listed securities.

The price performance of NASDAQ securities doubtless provided additional impetus for growing investor interest. As the chart on page 7 illustrates, NASDAQ's Composite Index has outstripped the Standard & Poor's 500 as well as most other broadly based market indices over a period of several years. It is still money that moves the market, and investor capital is flowing increasingly into NASDAQ companies.

Unusual price or volume activity in a NASDAQ security triggers an immediate investigation by NASD's Market Surveillance Section, backed up by sophisticated monitoring systems.



In light of NASDAQ's performance, it is not surprising that most successful NASDAQ companies no longer seek exchange listing once they become eligible. Of the nearly 3,700 companies whose securities were traded on NASDAQ in 1981, almost half were eligible for listing on either the AMEX or NYSE.

Today, NASDAQ issues represent a wide spectrum of companies, from those with potential to become the blue chips of the future to established giants of our free enterprise system. Included among the leaders are 196 companies with more than \$1 billion in assets and another 500 which have assets exceeding \$100 million. In the

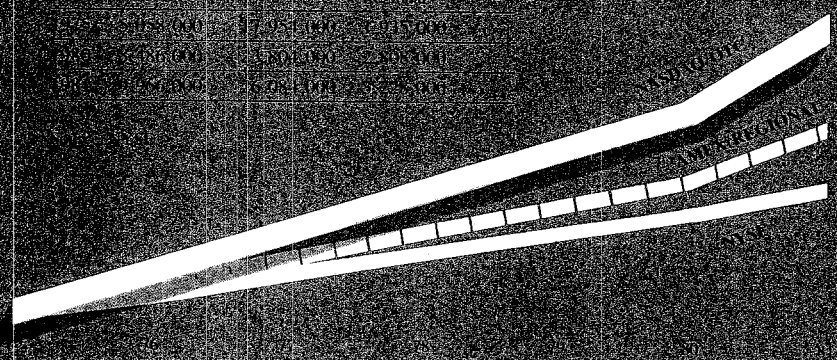
NASDAQ National List published in 76 newspapers, the typical issue as of late 1981 had an average bid price of 15 $\frac{3}{8}$, annual net income of \$11.1 million, revenues of \$163 million, assets of \$401 million and net worth of \$64.7 million.

Regardless of their size, NASDAQ companies derive broad support for their securities from the competitive market-maker system which characterizes the over-the-counter market. A clear majority of chief executive officers of NASDAQ-quoted companies who participated

Fast decisions and a frenzied pace are a way of life for market makers in NASDAQ securities, who execute orders for customers and also buy and sell for their own accounts. The competitive multiple-market-maker system is often cited by issuers as a major advantage of NASDAQ.

Growth in Shareholder Population By Market

Market	1980	1985	1990
NASDAQ	100,000	1,000,000	2,000,000
NYSE	100,000	1,000,000	2,000,000
AMEX	100,000	1,000,000	2,000,000
OTC	100,000	1,000,000	2,000,000



Price Performance of Leading Indicators

