Introduction

Before System Writer (the grandfather of today's current TradeStation), system developers and traders did not have a commercialized software platform to develop their trading ideas. We are not talking about charting packages; we are talking about programs that could understand a trading strategy based on technical analysis. Sure, there were other sophisticated programs in the 1980s that could be used, but they required a thorough understanding of programming, additional software, and extreme patience with the software developer. Most of these programs were not open platform; you had to program within their limited scripting language and could not share your programs with others. The programs that were potentially open platform usually required a separate editor and compiler and a very sophisticated user. In fact, we developed and still use a package that is based on a FORTRAN compiler. The System Writer/TradeStation programs provided one sleek package that gave the ability to test, optimize, and trade to the trading masses. TradeStation has been accepted worldwide as the premier market analysis platform and the standard against which other trading/testing platforms are measured. The latest version of TradeStation has evolved into more than just software; it is a fully self-contained trading platform that incorporates direct access brokerage for futures and equities traders. Along with the birth of TradeStation 6.0, Omega Research has been reborn and renamed to TradeStation Securities.

We are not here to proclaim TradeStation's Securities products to be the best in the business, but we are here to educate their users on how to use what is accepted as the industry standard. Of course Omega Research has had their problems; all software developers have had their problems. Recently, it was heard that the inventor of the CTRL + ALT + DEL key sequence at IBM

stated that he may have created it, but Microsoft made it famous. What sets TradeStation apart from the other software packages is its powerful scripting language EasyLanguage. EasyLanguage is more powerful than easy; it really isn't a scripting language, but more of a full-blown programming language. It can be compared to BASIC, FORTRAN, Pascal, or C. In fact, it is based off of a Pascal compiler and has been around since 1987. Sam Tennis, the father of EasyLanguage, wanted to provide traders with a simple and logical language that required little programming knowledge. In our opinion, he was successful in this endeavor.

Technical analysis of stocks and commodities is complex and you would think that a programming language that deals with such a lofty subject would be as complex. Fortunately, EasyLanguage comes with a complete library of the industry's most widely used analysis techniques. Third-party developers have further extended this library. Traders do not need to recreate the wheel, nor do they need the programming knowledge to put these techniques into action. Traders can even customize their own ideas or existing ones and add them to the library.

This book is designed for all TradeStation and EasyLanguage users. However, this book does expect users to be somewhat familiar with TradeStation and its functions. Beginners can obtain a good foundation on programming technique, program control structures, data structures, and familiarization on the use of the EasyLanguage built-in functions. All users will benefit from the chapters that discuss proper trading system development. We explore all areas of analysis techniques from Indicators to Paint Bars with a special emphasis on trading strategies.

Since a large portion of this book involves actual computer code, a companion CD-ROM, with all of the computer programs and data, is provided for the reader. The analysis techniques are provided in TradeStation 2000i and TradeStation 6.0 formats. Previous version users can still utilize the analysis techniques by simply typing them into their version of PowerEditor. Chapter 5 enlists the help of Microsoft Excel spreadsheet software to create three-dimensional contour charts. Excel isn't necessary, but some type of spreadsheet software is needed to transform the data into a chart.

This book was designed with the trader in mind. Most of the trading techniques were designed and tested with indices, futures, and commodities (we focused on these markets due to their long histories with trading systems). Strictly equity traders will still get a good programming and good system design education. Index (mini or full-size) and futures traders will be privy to five highly successful trading approaches. These approaches are good launching pads for further and much more detailed research.

In our opinion, the best way to make full use of this book is for the reader to work his way through the book starting with Chapter 1. At the end of chapters that have detailed *analysis techniques* (or *computer programs*—the two terms

are interchangeable), we would suggest loading from the CD-ROM, verifying, and running the programs in TradeStation. The concepts of each chapter should be mastered before moving on to the next chapter.

We hope you (the reader) enjoy this book and that it opens your eyes to the power of TradeStation and your own creativity. Good luck and good trading.