address. Finally, Goal Solutions provides a full-screen form to simplify setting up multiple-goal problems (and eliminate the need to reformat your spreadsheets), as is required by Goal Seeker.

The consistent and well-designed user interface and the context-sensitive help system make Goal Solutions easy to use, even for complex problems. We award it an excellent rating in this category.

**ERROR HANDLING:**
The programs handle common error situations equally well, and neither will accept invalid commands. For multiple-goal problems, both programs give you the option of stopping or continuing if an error occurs.

Goal Solutions gives you more informative messages, and it even displays a problem index screen that explains the error in detail and also gives some possible solutions.

Goal Seeker includes a feature that is missing from Goal Solutions: the ability to stop the goal-seeking process prior to its completion. This is a real time-saver if you discover that you incorrectly set up a complex problem with Goal Solutions, you must wait it out.

But overall, error handling averages out about equally for these two products, and each earns a satisfactory rating.

**SUPPORT:**

Although the two vendors differ in their level of user support, they do share a common feature: no copy protection. Brown Bag Software provides toll-free telephone support for Goal Seeker seven days a week, 17 hours a day (eight hours on weekends). The company also maintains a remote bulletin board system for its customers and offers a 30-day money-back guarantee.

We do have trouble getting through on the 800 number, but our first call was not returned, and we called back a few days later. After a brief period on hold, the support representative acknowledged the default and tried a fix, and asked us to call back in a week or so to see if a fix was available.

Although our specific problem wasn't solved, we like the extended hours of toll-free telephone support, and were surprised at how easy it was to get through. We rate support very well. The Goal Solutions manual doesn't mention the availability of technical support, but we later learned that vendor Enfin Software now includes its support phone number on an adhesive-backed card that comes with the package. Our call (not toll free) was answered by a friendly rep who left us on hold briefly while she got the answers to our questions. Support is available from 8 a.m. to 5 p.m. Pacific time. Enfin also offers a 30-day money-back guarantee. Although the vendor does not make this promise in writing, a spokesman said the firm will refund the purchase price to those who call and have problems. Overall, Enfin's support for Goal Solutions is satisfactory.

**VALUE:**

Goal Solutions now retails for $79.95, while Goal Seeker retail is $69.95. While Goal Seeker is a satisfactory performer, its poor documentation and the relative difficulty of learning and using the program prevent us from recommending this program—especially when we mention that the product is available for nearly the same price.

Still, Goal Seeker works, does what it claims to do, and only costs $59. In addition, if you use VP-Planner or SuperCalc 4, Goal Seeker's next version supports them, and Goal Solutions doesn't. (Brown Bag says Multiplan will also be added soon.) At this price, Goal Seeker is a satisfactory value. In addition to its increased functionality, Goal Solutions has better documentation and is easier to learn and use than Goal Seeker. Although it lacks capability, we highly recommend Goal Solutions and give it an excellent rating in value.

John Wolferbach is a consultant in marketing, provides personal computer applications, and programming.

**Volkswagen Deluxe Plus**

**New Version Of Lifetree Program Has Spelling Check**
By John Lombardi

Review Board

Volkswagen's Lifetree line has established a tradition of strong word processing production, with a reputation for excellence. The programs bearing the Volkswagen name are several, each designed to fill a particular need. Volkswagen 1 offers power and sophistication for the heavy-duty word processing user; Volkswagen Scientific provides word processing features for the word processor. Volkswagen Deluxe Plus gives a good set of word processing features to users who do not need the power and sophistication provided by Volkswagen 3.

**FEATURES:**

The Deluxe Plus version is actually a release of Volkswagen Deluxe (see "Volkswagen Deluxe", April 16, 1984), with some substantial enhancements that we describe in this update review.

The original Deluxe program offered a sophisticated and powerful feature to customize keyboard, screen, and printer information so that any character in the IBM character set could be displayed on-screen with any font and could be reproduced on any capable printer. The great flexibility of printer, keyboard, and screen definitions offered the opportunity for foreign language customization, enhancing the program to a certain set of users.

In Deluxe Plus, the new version, this flexibility has been eliminated (you can still customize characters in Volkswagen Scientific), while an excellent spell checking has been introduced.

(All programs, as always, derived from Volkswagen Deluxe, adds such performance features as text, sorting, print formatting, word processing, automatic page and spelling dictionary.)

**PERFORMANCE:**

New version has improved on-screen formatting. When editing a paragraph and making changes, Deluxe Plus...
The things that made Volkswriter Deluxe a good performer when first reviewed make it a good performer now.

The Volkswriter manual is as comprehensive and useful as in the original version; in most cases it is identical. Unfortunately, it comes in a paperback format instead of the previous three-ring binder, so it doesn't lay flat. The customer service is much less effective and full than in PFS Professional Write or Easy Extra.

Nevertheless, we found the documentation as usable because of its clear writing and thorough coverage that we rate it very good.

EASE OF LEARNING:
This version of the program is as with the entire series, straightforward in design and function. Although the screen is clear, lacking pull-down menus and other sly user interface bonuses that are all the rage among low-end word processors, Volkswriter Deluxe Plus is fairly easy to learn because of its predictable and understandable operation, and its decent tutorials.

While the program is not as easy to learn as the extremely easy PFS Professional Write or Easy Extra, we do rate it satisfactory in ease of learning.

EASE OF USE:
Volkswriter Deluxe Plus is lean in operation and clean in appearance. It does what it is supposed to do with a minimum of intervention or prompting. This means that Volkswriter Deluxe Plus becomes easier to use the more you use it, which is a matter of personal preference. Frequent users may even appreciate its undocumented design more than the better interfaces they encounter with competing products. We rate ease of use as very good.

VITAL DOCUMENTATION
I support your response to Mr. Thomas Haag of Forrest Software (Review Responses, October 24) that documentation is a vital issue in software reviews. I regularly check the documentation evaluation and refuse to buy software that is not documented adequately. Developers have gotten away with ignoring documentation in this industry for too long. The Altair 8800, and a lot has changed since. Please continue to ride hard on this issue.

David F. Smith
Editor and Publisher
Mac Tutor

ERROR HANDLING:
Common errors are trapped easily and Volkswriter has an automatic backup facility. It is not easy to lose data by operator error. You must continue to use the product on a floppy disk system and ignore the repeated warning messages about removing disks before saving the file. Balancing this feature is the lack of an Undo facility. Overall, we rate Volkswriter Deluxe's error handling as satisfactory.

SUPPORT:
Lifetree Software has an outstanding reputation for conscientiously supporting its users with free or low-cost upgrades and quality telephone technical assistance (though not toll-free). In addition to the usual 90-day media-only warranty, Lifetree offers a 60-day money-back guarantee on Volkswriter Deluxe Plus. The program is not copyprotected. Volkswriter Deluxe Plus earns a rating of very good in support.

VALUE:
The loss of the printer, screen, and keyboard customization is unfortunate, but this is an ease-of-use product that benefits from the addition of the good spelling checker that is not from the loss of customization. The program can be run from a floppy disk system, although it works much better with a hard disk.

At $90, the program is a very good value compared to its competitive PFS Professional Write at $199 and Easy Extra at $149. In fact, Volkswriter Deluxe Plus is even a very good value on its own.

John Lombard is a professor of history and author of live books. He has been working with computers since 1967.

Review Responses

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I support your response to Mr. Thomas Haag of Forrest Software (Review Responses, October 24) that documentation is a vital issue in software reviews. I regularly check the documentation evaluation and refuse to buy software that is not documented adequately. Developers have gotten away with ignoring documentation in this industry for too long. The Altair 8800, and a lot has changed since. Please continue to ride hard on this issue.

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RATING THE LASER PRINTER
Thank you for publishing an informative and generally accurate review of the AST Laserwriter (see "Printer Reviews Fast, This Quality Graphics," November 17). I would like to comment on your use of a four-page text printing speed test. As you know, laser printer engines require about 10 seconds of start-up time for the first page in a document. Presumably, you have reasonably included this time into your measurement for each laser printer tested. But because this 10-second delay is averaged into a four-page document in your speed test for printing duplicate pages, your calculated original-page-per-minute rating for the AST Laserwriter does not reflect its true capability.

T. John Hunter, director of computer science, Davidson College

SMART MODULES
As promised, we were to see your favorable Special Report on the Smart Spreadsheet with Graphics ("Rating the Competition Among Spreadsheets," November 10), we were surprised to find...