

AmericanWay

A young woman with dark hair is smiling broadly at the camera. She is wearing a black scuba vest with a yellow and red stripe across the chest. She has a black scuba tank on her back with a yellow band that says "PROFES". She is holding a blue and silver scuba regulator in her right hand. Her left hand is adjusting a yellow and black diving mask on her forehead. The background is a bright, slightly blurred outdoor setting, possibly a beach or a boat deck.

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December 1, 1986

**BREATH-TAKING
CARIBBEAN DIVES**

**Changing Times in London
State of J. Peter Grace**

COMPUTER UPDATE

by Gary Bowen

THE NEW BREED OF PROGRAMMER

There's a new breed of computer programmer today. These new programmers don't hang around computing centers with hexadecimal calculators dangling from their belts. Their programming training usually includes little more than setting the controls on a digital alarm clock. They are doctors, accountants, insurance brokers, or any professional who uses personal computers.

One professional who has donned the hat of programmer to extract more productivity from his PC is Fred Monsour, a radiologist with Ormond Radiology Associates in Ormond Beach, Florida. After he purchased his computer, Dr. Monsour says he found no off-the-shelf software to meet his specialized needs, so he decided to create his own. His first application involved calculations of heart-chamber volumes for cardiac catheterization studies at Ormond Memorial Hospital. He explains:

"There's a lot of formulas involved in figuring the left ventricular ejection fraction, the aortic valve area, and related statistics. One night I whipped up a 50-line program written in the BASIC language on an IBM PC to perform the calculations."

Dr. Monsour learned BASIC through the self-taught method of

"reading the manual." Although BASIC, dating to 1964, is a relatively old language by computer technology standards, Dr. Monsour says that recent improved versions are giving the language new life. He adds, "Generally BASIC suits small math-oriented problems; but for information processing I prefer a database language like Power-Base."

The new generation of languages tied to commercial database software products on personal computers has been the largest single factor in opening the realm of programming to legions of end users. Power-Base Systems of Birmingham, Michigan, is one of several companies that offer programming languages with their database software. Besides databases, these products are sold under the titles of data managers, filing systems, and similar descriptions, but they all have two things in common: They conveniently handle the reams of information related to office and business environments, and they offer a programming mode so users can customize computer management of information.

Dr. Monsour's success with a database language parallels that of Bob Kaufman, whose computing applica-


tions are a world removed from medicine. Through his company, Kaufman and Associates of Atlanta, Mr. Kaufman offers consulting services on custom sales management. His clients include insurance agencies, computer stores, and electronics suppliers. Says Mr. Kaufman:

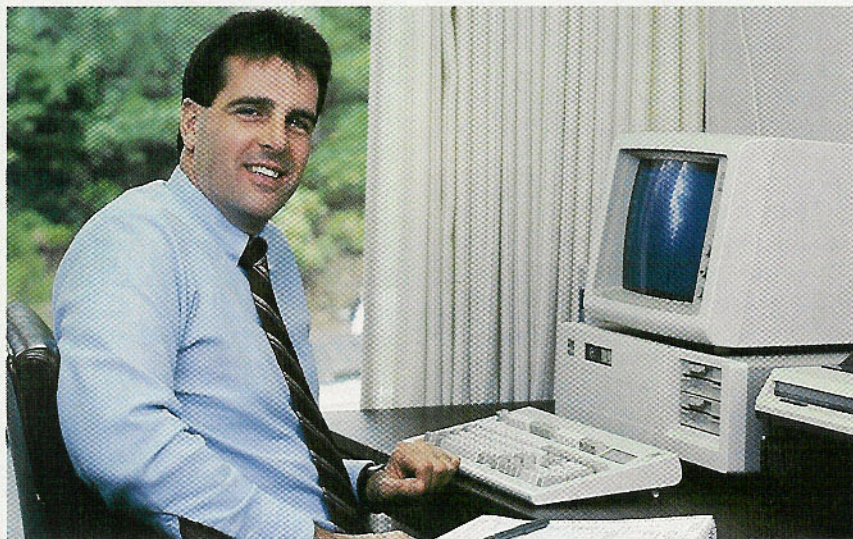
"Our objective is to help companies manage their sales efforts. We supply budget analyses, bid worksheets, and filing systems for managing customer prospects. I originally looked at canned software to perform those functions, but nothing met the requirements."

Besides prewritten software, Mr. Kaufman considered the services of a professional programmer. However, he says, "If you hire a programmer to solve the problem, it takes you almost as long to educate that person as it does to do the project yourself."

To design his system, Mr. Kaufman turned to *Framework* (from Ashton-Tate of Culver City, California) because it offered a high level of power in an easy-to-use system, "much easier than the cryptic macros of some popular spreadsheets," he says.

Mr. Kaufman started using *Framework* shortly after it was released. At that time there were no classes or educational seminars geared to the product. So he learned the system and its internal programming language, Fred, through books, manuals, and "a lot of trial and error." Mr. Kaufman estimates that it takes about a month without disrupting normal business activities for a novice to learn *Framework*.

The language Fred shares the spotlight with Power-Base, R:base 5000 (from Microrim of Bellevue, Washington), and Lotus (from Lotus Development Corp. of Cambridge, Massachusetts) as the most popular dialects among new computer owners. One devout student of the subject asserts that users waste one-third of the software package if they do not exploit its programming capabilities. 



Bob Kaufman of Atlanta originally looked at prewritten software to perform the functions of his sales management consulting business, 'but nothing met the requirements,' he says. So he designed his own.