SOFTWARE FOR AEC PROFESSIONALS SINCE 1984

DataCAD's First Paying Customer

by Bruce Chitiea

I cannot be sure that I deserve the #1 slot. It depends on how you measure it. Honors for the first 'civilian' user certainly belong elsewhere, likely at the Southern California Institute of Architecture in Santa Monica CA where Microtecture received an early unofficial staff review.

As noted below, my use of Microtecture begins in late 1984 on the Corvus Concept, prior to the introduction of the PC version and the name "DataCAD" in spring 1985. I do recall that my first PC-compatible serialized disks (Concept beta disks bore no serial numbers) bore serial number 10005. Microtecture's control of basic production and control data was pretty loose during its first years, so I can't speak to numbers 10001 - 10004. (I'm proud to be able to say I ended up with single-digit serial numbers for one helluva lot of now-famous things).

I'm probably the first commercial DataCAD Dealer in the Western United States, as I began recording Microtecture sales in spring/summer 1985. Another early dealer from Virginia Beach, David Porter, may actually hold the top spot and may stand - shoulder-to-shoulder with me - in Dave's memory as the biggest whining, complaining, ungrateful, never-satisfied, always demanding pain-in-the-ass beta tester in the early network. I'd like to think that our input helped make DataCAD what it is today, although I'd sure hate to be on the receiving end of MY input.

My DataCAD story begins in Las Vegas in late fall 1984. Griff Berg and Eric Smith displayed the 'Microtecture' suite of architectural CAD, accounting and job costing software in an outlying gallery of some trade show - possibly Comdex - which I was prowling for useful CAD tools (Note that 'DataCAD' came later to avoid a copyright dispute with a prior registrant of the 'Microtecture' name).

I had been testing and applying early 2D and 3D CAD products since early 1983 to my mechanical design practice: large-scale fire and explosion suppression systems for refineries, high-rise buildings and military facilities. Operational design requirements well exceeded the abilities of anything but the large minicomputer based systems of the day, crying out automation solutions.

Invited by vendors and manufacturers to help prove the utility of desktop CAD at trade shows and CAD seminars, I had the unique opportunity to discern the collective wish of many design disciplines, coming away with a clear understanding of what would constitute a viable desktop CAD system. Like everyone else at the time, I was feeling my way into uncharted territory. Our high hopes for desktop CAD ran well

ahead of available technology, and anyone trying to profitably produce drawings had to contend with serious, debilitating limitations.

The Victor 9000, NEC something-or-other, Corvus Concept and Sage boxes were the screamers of the day, all running at pretty much the same speed of 4.77 mhz. Each could support high resolution monochrome (800 x 400), and made useful tools. The IBM PC and PC-XT, with their support for 12", 320 x 200 CGA 4-color resolution and 600 x 400 monochrome simply couldn't provide a useful production experience.

Scroll speeds (on all but the Motorola 64000-based Concept) were so slow that most production drawings combined plotted, parametrically-placed symbols and manually-drawn lines, text and dimensions. To enjoy a comprehensive digital experience, you paid CalComp or Intergraph $500,000 and trained for a year, which meant we could only hope and press on.

On this background, the 2D-to-3D wire-frame translations produced by Microtecture on the Corvus Concept in Las Vegas simply knocked me over. 3D aside, 'simple' things like WALLS and CLEANUP features were RADICAL advances for the day. (Anyone enduring floor plan creation with AutoCAD's POLYLINES feature can tell you why). The Corvus display - a rotating tall/wide screen designed for graphics - was unequaled at the time.

On the spot I wangled myself a beta slot, exchanged my children's' birthright for a Corvus Concept in November 1984, eagerly received the (4? 5?) 5.25" Microtecture floppies and began translating symbol libraries from Victor-9000, CP/M-based AutoCAD. In the process I managed to assemble a 'comprehensive' set of architectural office and project management products (running in the UCSD Pascal "P-System"), incorporated "Chi Computer Systems, Inc." and got set to tear up the world.

Ah, but it was not to be. Seeing the writing on the wall clearer than I, Griff and Eric pulled the plug on Corvus Concept development and converted everything over to a code base suited for the 80286-based IBM PC-AT and its radical 640 x 350, 16-color EGA graphics subsystem. The onrush of the IBM/PC-DOS juggernaut could not be denied, and I (grudgingly) made the switch to evade destruction beneath its wheels.

That's when life became interesting ... and expensive.

P.S. A note on an underhanded marketing trick I pulled at an AEC show, sometime in early 1986.

I handed out a floor plan with doors, windows, intersecting walls, one rounded corner, string and baseline dimensions, wrapped in a title block, with text to the effect: "Ask every vendor to demonstrate these simple, basic operations". The AutoCAD dealers coming to my booth were not smiling.