# INTERNAL MEMO

**To:** ~~RICHARD GIBBS~~ /
DUNCAN BALDWIN

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**From:** HELEN TIZARD

**Date:** 22 NOVEMBER 1990

**Subject:** PC USER ARTICLE

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Please find attached the article which appeared in PC User. As you are aware this article was by Louise Cole who contacted DR for information.

We need to follow up her comments with a letter to the publication explaining that we were aware of this problem and demonstrating our commitment to solving incompatibilities. Richard, could you draft the reply and send it is James Mustarde at SPA as discussed.
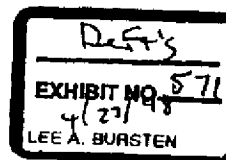
We may well see a few more of this type of article appearing in the press and therefore should handle all press calls carefully. In my absence, James Mustarde at SPA will always act as spokesperson on DR's behalf. If you receive a call and no-one qualified to answer is available, please take the journalist's details - telephone number, publication, nature of enquiry and pass to James at SPA on 071 493 3662.

The article also raises a further point which is the commitment of major hardware and software vendors to support DR DOS 5.0. If we can demonstrate that we have mainstream support from these vendors, the incompatibility arguement should fade. What are the possibilities of at least being kept abreast of new hardware developments by leading PC manufacturers so that we can maintain DR DOS 5.0 compatibility?

Kind regards

Helen Tizard

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Def't's
EXHIBIT NO. 571
4/27/98
LEE A. BURSTEN

C0057506

Plaintiff's Exhibit

**5203**

Comes V. Microsoft

**MS-CCP-MDL 5014827**

MS-CCPMDL 000005014827

# DR-DOS 5.0 refuses to run on some PS/2s

DR-DOS 5.0 will not run on IBM's PS/2 Model 30 286s, PC User has discovered, because of incompatibilities in the way in which the products address memory.
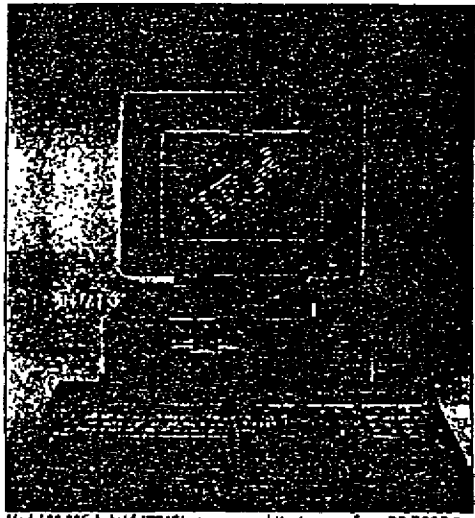
Users trying to run the operating system on Model 30 286 machines have been perplexed by continual downtime. Digital Research engineers worked on the problem for two weeks after PC User brought it to their attention, and the company has now promised readily available updates through its dealer network.

The Model 30 286 is an AT which accesses memory above 1Mb by MCA-type methods, and this unexpected sophistication causes the software to crash.

John Constant, product development manager for DR-DOS 5.0, said: "DR-DOS ROM BIOS tests say that the Model 30 286 is an AT, and it works on that basis. But it actually needs further time to work out that it is an AT with some MCA functions."

The problem concerns a function of the MemoryMax feature in DR-DOS 5.0, which allows the system to access memory just above the 1Mb barrier while operating in real mode, by activating the A20 line. How the software enables and disables this line is dependent on the machine architecture.

Microsoft's product manager for systems and marketing, Andrew King, said Microsoft works around such incompatibility problems by letting hardware vendors tailor the product to particular machines. "Every machine handles A20 differently and has to be supported in a different way," he said.

The problem was brought to PC User's attention by reader Andy Osborne, a senior design engineer at Servowest. He is now receiving an updated version of the software. It is not known how many users are affected by the problem. Earlier versions of DR-DOS are not affected by this problem, since they do not include MemoryMax.

If you have any questions regarding compatibility with DR-DOS 5.0, call Digital Research on (0635) 35304.

Model 30 286, hybrid AT/MCA memory architecture confuses DR-DOS 5.0

# Autodesk's AutoCAD R11 finally reaches dealers' shelves

Autodesk is finally shipping Release 11, the long-awaited upgrade to its package AutoCAD.

The first version available is the 386 DOS Extender, which gives users access to effectively unlimited memory. It is still priced at £2,500; an upgrade from Release 10 costs £256.

The major enhancement to Release 11 is the incorporation of the solid modelling functions of AutoSolid into an optional module which is priced at £500.

The AME was developed using another new feature, the AutoCAD Development System. This is a programming interface which allows developers using languages such as C to write add-on programs that can act as extensions to AutoCAD. These will perform much faster than programs written using AutoCAD's internal language, AutoLisp.

There are a number of improvements to the user interface, including more use of dialogue boxes. A new facility called the External Reference file allows one drawing to be viewed within another, without becoming part of it. This is for composing large drawings or for basing a design on a template.

Release 11 also introduces the new concept of 'Paper Space' which effectively provides a way of positioning and editing views of a drawing on a virtual sheet of paper in readiness for plotting.

The product is currently being sent to UK dealers.

# Comdex strikes an upbeat note

The challenge of exploiting sophisticated network architectures while simplifying user access was presented in the packed halls of Comdex last Monday in Bill Gates' opening speech.

As chief executive officer and president of Microsoft, Gates' vision of computing in the 1990s has proved an appropriate introduction to Comdex, since Windows 3.0 looks set to dominate the show. Over 200 Windows products are listed in the show's directory, and Microsoft claims to have shipped over one million copies of the GUI for MS-DOS since its launch earlier this year.

One of the key exhibits was the TFT colour version of IBM's newly launched P75 luggable. The bright, clear colour screen, with a 10-inch diagonal, was developed in conjunction with Toshiba, and received positive reviews from visitors.

Colour capability was to the fore. A plain paper colour printer from Coloroc claims to offer near photo-quality colour PostScript output, and CorelDraw 2.0 was launched.

Various notebook computers were also on show, weighing less than 5lbs were on display, as were almost a dozen SX notebooks.

Many vendors were showing high-end PCs aimed at minicomputing environments. DEC showed its six-processor 486 box, and ALR launched a Compaq SystemPro register-level clone called the PowerPro. Epson, the last of the EISA gang of nine to launch its 486 alternative to MCA, introduced its EISA 486 server.

Powerful Unix workstations were also on show, including the new SPARCstation 2 machines from Sun (see page 20) and numerous SPARC clones from several Far Eastern vendors and CompuAdd.

Comdex evoked a buoyant mood in vendors and visitors alike, ignoring whispers of recession, as a record 1,850 vendors addressed an audience of more than 118,000. Vendors suggested likely growth rates between five and ten per cent in the US during 1991, and between 15 and 20 per cent in Europe.

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