

Inter-Office Memorandum

To Alto users Date October 20, 1975  
From Bob Sproull Location Palo Alto  
Subject Changes to .AL format Organization CSL

XEROX

One vital piece of information is missing from the present .AL font format--the baseline of the font. The format is redefined to accomodate a 7-bit field "baseline," which is the distance (in bits) from the baseline to the top of the highest character. Baseline=0 means that you are reading a font file created before this format change, and you must either guess at the baseline or suffer.

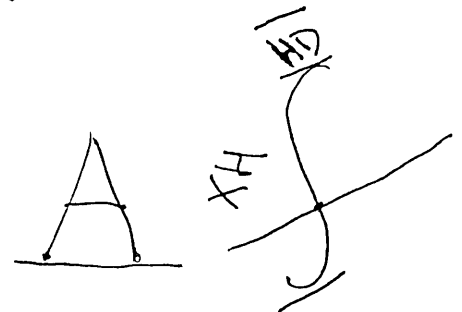
The format change only involves the first two words of the font:

```
structure AL :  
  [   
    Height word //Height of font  
    Proportional bit //True if font is proportionally spaced  
    Baseline bit 7 //Here is the new baseline info  
    MaxWidth byte //Maximum character width  
  ]
```

Note: The Height entry is the honest truth about the font: if the user allocates Height scan-lines for a text line, no character will overflow either above or below the line of text. Note that characters with 0 words of bit-map (e.g., space) may exceed the Height number without trouble.

The MAXC directory <ALTOFONTS> will contain *only* .AL fonts with baselines correctly incorporated. This directory is at present empty; I will build it up in time. Matt Heiler's wonderful new fonts coordinated with EARS fonts will shortly begin to appear on <ALTOFONTS>.

<FONTS> contains .AL files in old format



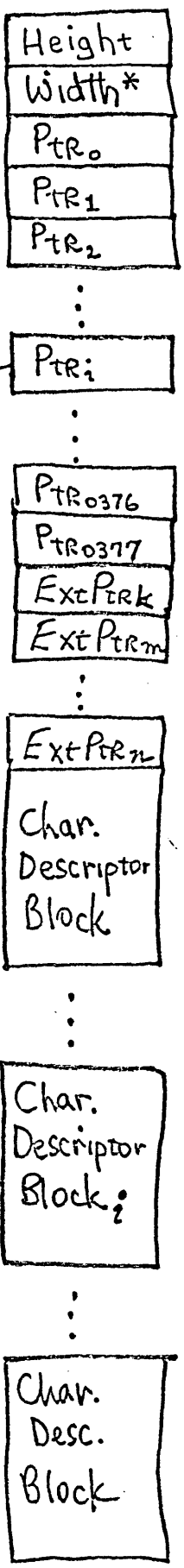
# Alto FONT

STRUCTURE DBL

```

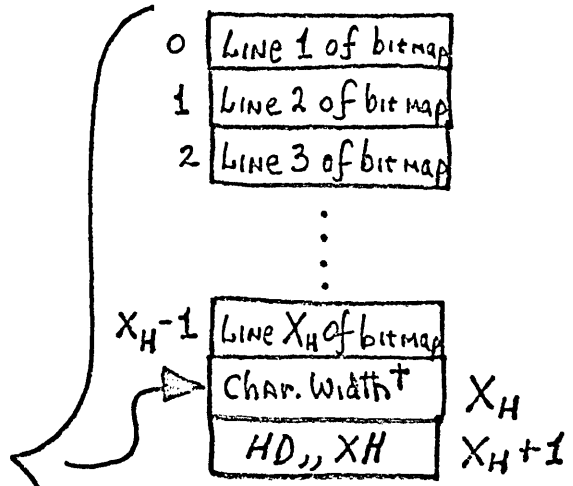
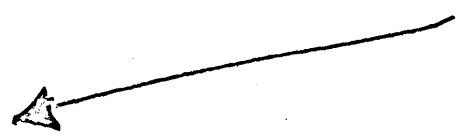
NEXT      WORD
RESOLUTION BIT 1
BACKGROUND BIT 1
INDENTATION BIT 6
WIDTH     BIT 8
bitMapAddress word
height    word
]
    
```

Fontbase



Width\* : if font is fixed pitch, then font character width else  $\phi 100000 \wedge$  widest character width.

Char. Width<sup>†</sup> : if char width < 16, (2 \* width) else 2 \* pseudocharcode, where Fontbase + pseudocharcode point to the <sup>first</sup> extension block of the character



HD : ~~header~~ header, no. of scan lines to skip before displaying bit map

XH : height of bit map.