

November 10, 1959

A NOTE ABOUT FLOATING POINT ZEROS IN STRETCH
(Addenda to the STRAP-1 Write-up)

A "true normalized floating point zero" in STRETCH will not be a pure zero, but a zero fraction with a negative exponent consisting of all binary ones. Since this is the case, STRAP-1 will assembly any normalized floating point DD field which the programmer specifies as zero in the STRETCH "true zero" form. To obtain a pure zero in a normalized floating point field, the "X" entry (see page 36 of the STRAP-1 write-up) may be used to replace the binary exponent with zeros.

EXAMPLES: DD(N),0 will produce a "STRETCH type" zero
 DD(N),OXO will produce a pure zero

COMMENT: There are other ways to obtain a pure zero as a floating point data word, but the above is probably the most straightforward. In the case where an illegal character has been used in a floating point normalized DD field, the field will be set to pure zero, and a "J" error mark will appear on the assembly listing. Another, more legitimate, way of obtaining a pure zero floating point normalized field is by entering a card that has a name, but no other information (OP, Pseudo OP, etc.). STRAP-1 will assign a floating point normalized word location to the name that appears on the card, and store zeros in that location.