Proposal for C23
WG14 N2846

Title:	Clarification about expression transformations
Author, affiliation:	C FP group
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Proposal category:	Editorial
Reference:	N2596

F.9.2 "Expression transformations" says:

> [2] The equivalences noted below apply to expressions of standard floating types.
>
> ...
>
> $1 \times x$ and $x/1 \to x$ The expressions $1 \times x$, $x/1$, and x may be regarded as equivalent (on IEC 60559 machines, among others).[399]
>
> ...
>
> 399) Strict support for signaling NaNs — not required by this specification — would invalidate these and other transformations that remove arithmetic operators.

Vincent LeFevbre sent email to CFP pointing out that floating-point extensions mentioned in other places in C also invalidate such transformations.

The following suggested change expands footnote 399 to include such extensions.

Suggested change:

In F.9.2, change the footnote:

> 399) ~~Strict support for signaling NaNs — not required by this specification — would invalidate these and other transformations that remove arithmetic operators.~~ Implementations might have non-required features that invalidate these and other transformations that remove arithmetic operators. Examples include strict support for signaling NaNs (an optional feature) and alternate exception handling (not included in this specification).