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Subject: Conditional normative status for Annex G

This is a proposal to change the status of Annex G "IEC 60559-compatible complex arithmetic" from "informative" to conditionally "normative".

G.1 says "Although these specifications have been carefully designed, there is little existing practice to validate the design decisions. Therefore, these specifications are not normative, but should be viewed more as recommended practice." This reason for the "informative" status of Annex G was true in 1999. Since then, however, the HP-UX compiler and math library for Itanium have supported Annex G since 2001, and Sun has been shipping support for Annex G since 2005.

If Annex G is normative, an implementation that defines `__STDC_IEC_559_COMPLEX__` will be required to conform to the Annex G specification. This gives users something to rely on and test suites something to test, which its current status as "recommended practice" does not.

Also, this change gives Annex G the same status as other optional features in C1x, which should simplify our effort to document which features are optional.

Even as normative, Annex G will be an optional feature of an optional feature in C1x. The only impact of the change on current implementations will be on any that doesn't really conform to Annex G but defines `__STDC_IEC_559_COMPLEX__` anyway.

Proposed changes:

In Annex G title, change "(informative)" to "(normative)".

In G.1, remove second and third sentences.

In G.1, last sentence, change "should" to "shall".

In G.1, append the sentence "An implementation that defines `__STDC_NO_COMPLEX__` shall not define `__STDC_IEC_559_COMPLEX__`."