Final comments from the advocate after the milestone subcommittee meeting on May 16, 2023

The two experts strongly supported the proposal long back. During the milestone subcommittee meeting on May 16, 2023, the committee agreed to include the name of Grace Hopper in the citation. Based on the suggestions available so far in the discussion page, also from the discussions during the milestone subcommittee meeting, the proposal has been revised by the proposer in significant points, such as title, citation and justification of names in the citation is also provided.

. The proposer agreed upon the following title and citation

Grace Hopper's Compiler and Programming Language Work, 1952-1959

Citation:

In 1952, Grace Hopper created A-0, the first compiler, which translated mathematical code into machine language. Her FLOW-MATIC programming language employed English commands and user-defined data names and saw industry and military use starting in 1957. Based on a corporate and government effort, and influenced in part by FLOW-MATIC, a 1959 COBOL (COmmon Business Oriented Language) specification was published. COBOL compilers then became popular in business and government worldwide.

Justification of name(s) in the citation,

Grace Hopper was one of the first programmers of the Harvard Mark I computer. She was a pioneer of computer programming, and she invented and coined the term "compiler." Hopper popularized the idea of machine-independent programming languages, which eventually led to the development of COBOL. Her work also led to the implementation of standards for testing computer systems and components, most significantly for early programming languages such as FORTRAN and COBOL. Interestingly, her discovery of a moth stuck in a relay of a Harvard Mark II computer led to the terms "bug" and "debugging" as commonly used by computer programmers as well as lay people. Grace Murray Hopper worked on many teams and programs, her inventions were promoted/demonstrated by many lecturers at the University of Pennsylvania, and she was often referred to as "Amazing Grace." She retired from the Navy as Rear Admiral, and her importance is widely recognized and appreciated worldwide. As such, we need to honor this woman mathematician, inventor, and computer programmer with her name in this Milestone's citation.
[3] https://en.wikipedia.org/wiki/History_of_compiler_construction

As an advocate , I approve this proposal moving forward for the IEEE history Committee's consideration.