IEEE Standards Interpretations for IEEE Std 1003.2™-1992 IEEE Standard for Information Technology--Portable Operating System Interfaces (POSIX®)--Part 2: Shell and Utilities

Interpretation Request #79
Topic: sh -o **Relevant Clauses:** 4.56

In the description of the "sh"utility in POSIX.2 subclause 4.56, the option to -o is shown as required. The semantics of the -o option are specified by reference to subclause 3.14.11 (the "set"builtin command), in which no description of the behavior is given when the option to -o is omitted. POSIX.2 subclause 2.11.3 states in part Unless otherwise stated in the utility description, when ...a required option argument is not provided, standard utilities shall issue a diagnostic message to standard error and exit with nonzero exit status. My question regards the use of the -o option to "sh"with no option argument. If the command sh -o < script_file is issued, is the shell required to issue a diagnostic and exit with nonzero status? Or is the shell, as an extension, permitted to have other behavior? If the latter, is this true for other utilities with required option arguments as well? There are two ways to look at this: The behavior is unspecified, and implementations are free to provide any desired behavior as an extension. The behavior is governed by the language cited above from 2.11.3. As a point of practice, historical implementations have allowed the use of "set -o"and "sh -o"with the semantics of displaying the current settings of all options.

Interpretation Response
The specification in 2.11.3 clearly states the behaviour for sh -o and conforming implementations must conform to this.

Rationale for Interpretation
None.