

Table 7 **Source code libraries generated by "GENTEXT"**. This list forms part of the **equivellipse.DEF** file, in which "equivellipse" is the GENOPT user's generic name for the case. The complete equivellipse.DEF file is listed in Table a2 of the appendix. **BEGIN.NEW** is listed in Table a3; **STOGET.NEW** is listed in Table a4; **STRUCT.NEW**: skeletal form is listed in Table a14, the GENOPT-user-completed final version for the generic case equivellipse, is listed in Table a16; **BEHAVIOR.NEW**: skeletal version before inclusion of the GENOPT-created labeled common blocks is listed in Table a28 (where it has the name eqellipse.SUB), skeletal version after inclusion of the GENOPT-created labeled common blocks is listed in Table a13; **CHANGE.NEW** is listed in Table a5.

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BEGIN.NEW = source library for FORTRAN program which will be used to set up the starting design, material properties, and any other data you wish.

STOGET.NEW = source library for FORTRAN subroutines which are used to transfer labelled common blocks. These labelled common blocks are the data base.

STRUCT.NEW = source library for FORTRAN subroutines that perform the analysis for each iterate in the set of optimization iterations. You may have to complete this routine (add dimension statements, subroutine calls, output statements, etc.). The library, **STRUCT.NEW**, also contains a skeletal routine, SUB. TRANFR, that you can complete in order to translate data names from from those just established by you (TABLE 2) to other names used by the developer of previously written code that you may plan to incorporate into SUBROUTINE STRUCT and/or SUBROUTINES BEHX1, BEHX2, BEHX3,...BEHXn (described next).

BEHAVIOR.NEW= a library of subroutine skeletons, BEHX1,BEHX2, BEHX3,...BEHXn, that, upon completion by you, will calculate behavior for a given design or design perturbation. Skeletal subroutines for a user-written constraint condition, USRCON, and a skeletal routine for the objective function, OBJECT, are also generated and are included in the **BEHAVIOR.NEW** library.

CHANGE.NEW = FORTRAN program that permits you to change
certain program parameters without having to
go back to BEGIN and run a case from scratch.

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