

Table 8 **Contents of small files created 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. The completed files for the GENOPT user's generic case, "equivellipse", are included in this report as follows: **equivellipse.PRO** is listed in Table 6; **equivellipse.NEW** is listed in Table a10; **equivellipse.INP** is listed in Table a1; **equivellipse.COM** is listed in Table a6; **equivellipse.WRI** is listed in Table a9; **equivellipse.REA** is listed in Table a8; **equivellipse.SET** is listed in Table a11; **equivellipse.CON** is listed in Table a12; **equivellipse.SUB** is listed in Table a28; **equivellipse.DEF** is listed in Table a2; **equivellipse.CHA** is listed in Table a7; **equivellipse.DAT** is the same as the file **equivellipse.INP** and is listed in Table a1. Several of these small files are FORTRAN fragments. The FORTRAN small files are incorporated automatically by GENOPT into the appropriate places in the libraries listed in the previous table. The files that are FORTRAN fragments are: equivellipse.NEW, equivellipse.COM, equivellipse.WRI, equivellipse.REA, equivellipse.SET, equivellipse.CON, and equivellipse.CHA.

FILE NAME	DEFINITION OF FILE CONTENTS
equivellipse.PRO	Prompts and help paragraphs for interactive input to the user-developed optimization code.
equivellipse.NEW	Part of BEGIN.NEW that contains calls to SUBROUTINE DATUM and SUBROUTINE GETVAR. This coding sets up the interactive input for the starting design in the user-generated design code.
equivellipse.INP	Image of interactive input for user-developed program, generated to save time in case you make a mistake during input.
equivellipse.COM	Labelled common blocks generated specifically for the user-developed class of problems.
equivellipse.WRI	Part of subroutine for writing labelled common blocks in SUBROUTINE STORCM (in Library STOGET).
equivellipse.REA	Part of subroutine for reading labelled common blocks in SUBROUTINE GETCOM (in Library STOGET).

equivellipse.SET	Part of SUBROUTINE SETUPC in which new values are installed in labelled common blocks from the array VAR(I), which contains the latest values of all candidates for decision variables.
equivellipse.CON	Calls to subroutines, BEHX1, BEHX2, BEHX3,..., which calculate behavior such as stresses modal frequencies, buckling loads, etc. Also, calls to CON, which generate the value of the behavioral constraints corresponding to BEHX1, BEHX2, BEHX3,... Also, generates phrases that identify, in the output of the user-generated program, the exact meaning of each behavioral constraint.
equivellipse.SUB	Skeletal subroutines, BEHX1, BEHX2, ..., and the skeletal objective function, OBJECT.
equivellipse.DEF	List of user-established variable names, definitions, and roles that these variables play in the user-generated program. Also, contains list of files created by GENTEXT and the functions of these files.
equivellipse.CHA	Part of SUBROUTINE NEWPAR (called in the CHANGE processor) in which labelled common values are updated.
equivellipse.DAT	Image of interactive input for user-developed program, generated to save time in case you make a mistake during input. This file is used by the INSERT processor.

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