## Mac F2C

## A FORTRAN-to-C translator for the Macintosh

What is Mac F2C?

Mac F2C is a FORTRAN-to-C translator. It will read a file of FORTRAN code and produce a file of C code. When compiled and linked with the special support libraries included with Mac F2C, this C code will work just like the original FORTRAN code. The Mac F2C package also includes F2C for MPW, which will let you compile, link, and execute FORTRAN code from within the MPW environment.

Mac F2C is the Macintosh port of the UNIX program f2c developed at AT&T. AT&T permits the use of the f2c source code for non-profit purposes. You can get a copy of the f2c source code at netlib.att.com.

Mac F2C is freeware. This means that AT&T and I maintain our copyrights on it, but allow you to use it freely. You may also distribute it freely so long as you distribute the whole package with all the documentation and supporting materials.

Please do not post incomplete copies of Mac F2C on America On-Line, CompuServe, or other public bulletin boards. It's very hard to use Mac F2C without the instructions and supporting files. It becomes a real headache for me when users of these incomplete packages send me nasty emails about my hard-to-use, poorly documented software.

What do I need to run Mac F2C?

The minimum requirements to run Mac F2C are:

- a 68020 CPU or better
- System 7.0 or later
- At least 1 MB of available RAM (2 MB is preferred)

Where do I go from here?

The next step is to read the "Quick Start" instructions in the next chapter. Mac F2C is not ready to go out of the box, so please read those instructions to see how to set up the support libraries and use the C code produced by Mac F2C.

You should also read the more detailed documentation on the FORTRAN-to-C compiler itself. Included with Mac F2C is the document AT&T Report 149.ps, a PostScript file which you can download to any PostScript printer. It will produce a copy of AT&T Computing Science Technical Report No. 149. This report provides very detailed documentation on f2c, the UNIX program which is the translator at the core of Mac F2C. Consider this report your compiler and language reference manual. I recommend all users print out and read this report.

If you want to drive Mac F2C with AppleEvents, check out the chapter on "Scripting Mac F2C" and the sample Mac F2C AppleScripts in the Mac F2C Extras folder. The "Scripting Mac F2C" chapter contains detailed information on sending AppleEvents to Mac F2C. The Mac F2C Extras folder includes not only some sample AppleScripts but also a header file which you can use with your own code.

Before sending a bug report please glance at the chapter "Known Bugs". If you have trouble getting the C code produced by Mac F2C to run correctly, refer to the chapter "When Translated Code Won't Run". If floating point values do not appear to round correctly when output, read the information in the chapter "If Floating Point Numbers Don't Display Right". Finally, if you plan on moving code between a UNIX machine and a Macintosh and/or will be mixing code translated by f2c on a UNIX machine and Mac F2C on a Macintosh, please look at the chapter "Mac F2C vs. UNIX f2c".