#### Flight Planning Tools for Excel 7.0 Version 2.0

# Introduction

#### Overview

These spreadsheets, which were developed using Microsoft's Excel version 7.0 (Windows 95) program, are distributed in two separate Excel files:

VFR Plan.xls Navigation logs for flights under visual flight rules.

IFR Plan.xls Navigation logs for flights under instrument rules/conditions.

A separate package provides a set of Excel based weight and balance charts for various Cessna aircraft, which could be adapted for other manufacturer's aircraft.

# **Changes From Version 1.0**

The biggest difference between this version and the initial release is that the Communications and Weather Information spreadsheets have been dropped from the package, as the Author made very little use of them, and the Terminal and Stopover sheet has been completely re-formatted to allow much more information to be recorded in a more logical manner.

The format of the VFR navigation log has been changed a little. The biggest difference is that the column containing the checkpoints has been moved to the middle. This allows the printed form to be folded in half, which makes it more convenient to use in flight on a small clipboard. Some slight re-arrangements of the data entries allowed the elimination of a couple of columns, which allows the printed form to be a little bigger while still fitting on a single page.

The IFR planner is a further modification of the VFR version designed to handle all headings in degrees magnetic (versus the use of true compass readings on the VFR logs). The IFR form provides space to record other types of information not generally useful to the VFR pilot.

The other change from Version 1.0 is that the weight and balance forms (originally designed only for a C-150) were removed and are now packaged separately. The new Weight and balance package includes forms for the basic C-150 and C-152 along with a number of variations of the C-172.

### **Document Organization**

The remainder of this document will describe each of the forms in detail, explaining the rules for entering the data and the methods used to calculate the computed results. Where appropriate, suggestions regarding possible modifications to the spreadsheets will be discussed along with any known pitfalls which might be encountered in the process.

# <u>Disclaimer</u>

The Author makes no guarantees or warranties as to the accuracy of the results, and reminds users that the pilot in command of the airplane has the full responsibility for ensuring that he or she has all of the information about the flight and that that information is as accurate as possible. In some cases the computed results on the navigation logs are approximations, and that will be noted in the discussions. The results from the program have been validated using an E6-B whiz wheel, and to the best of the Author's knowledge are accurate enough for use in flight. The Author has flown numerous VFR cross country flights using the results of the program with very good results using both the VFR and IFR programs.

The tools are distributed *as-is*, and although the Author would certainly be interested in hearing proposals for improvements and enhancements, he is not in a position to provide any level of real-time support for the tool.

JMP - 1 - 11/14/10