# User Manual

## Introduction

Welcome to easyHoldPro, a tool that makes flying a holding procedure pretty simple. easyHoldPro not only provides you with WCAs, headings and times. easyHoldPro makes it simple to overview every phase of the holding, due to the preallocation of times in every leg of the holding on the integrated stopwatch.

Turn information transmitted via audio outputs keeps you focused on the instruments. Simply starting the stopwatch is necessary in every holding phase, stopping will be performed automatically.

For switching to the next leg, easyholdpro neither makes use of GPS-data, nor does it monitor the position in the holding via GPS. The preallocation of times Is based on the logic pattern of the process of flying a holding and the usage of the Stopwatch for each step in the holding.

## System requirements

The application functions on all iPhones, that hold the operation system IOS 14.0 or higher. However, the utilization of an iPhone SE 1<sup>st</sup> generation is to be avoided, due to the small display and the corresponding difficulties in the correct presentation of data.

## Starting the App

After starting the easyholdpro it is indicated, that the app solely is meant to be a help for the calculation of the holding data. This has to be confirmed by the user.

This application is a tool for calculating and briefing a holding procedure. The results are only as good as the data you entered. Pay attention, you might not be able to rely on the results due to the fact that the conditions can be unstable.

Do not use this application as a primary means for navigation or as a tutorial to fly a hold. You have to be familiar with this procedure.



Picture 1

easyholdPro features 2 agendas, the input-agenda (picture 2) and the briefing-agenda (picture 3). The switch between both agendas is possible, if all required data has been put in the input-agenda. The briefing-agenda is shown, when the user swipes the input-agenda to the left. To switch from the briefing-agenda back to the input-agenda, the user either can swipe the display to the right or click on the data input button in the upper-left corner of the displays.



A started Stopwatch, however, will be deleted, by doing so. See: the stopwatch.

## The input-agenda

A compass rose is located underneath the input-agenda, which is an exact representation of the situation based on the input data. The presentation gives a broad overview over:

- The current heading to the holding fix
- The predicted approach procedure
- The direction of WCAs during approach and the different holding legs

Solely seven inputs are necessary, to brief the holding is a matter of a few seconds. Click on the respective input-field to fill in required data. This results in the appearance of a numeric keyboard. After the input of all required data, the situation according to the input data will be represented in the compass rose.

The little yellow airplane stands for the magnetic heading to the holding fix, while the white arrow with three arrowheads symbolizes the direction of the wind.

Heading-inputs greater than 359°, will automatically be replaced with 359°.

Depending on the display-size the keyboard might cover the compass rose. To view the situation on the compass rose, click on the display (blue area) and the keyboard will disappear. It shows again, by tapping on an input-field.

#### The briefing-agenda

When all input data were done, the agenda has to be swiped to the left and the briefing-agenda (picture 3) appears. Here, all data corresponding with the current leg (approach, inbound, outbound) is shown in a structured order, ready for briefing.

All calculated WCAs on the briefing-agenda are total values, which are applicable on the process of flying the current heading. For example, the shown value of the outbound leg is exactly 3-times the value of the inbound-WCA.

At the same time, the stopwatch is preallocated with the suitable leg-times. See: the stopwatch.

#### The stopwatch

While using the app with an iPhone 6s, SE 2nd gen, or 8, the stopwatch has to be made visible by clicking the bottom edge of the phonedisplay. (picture 4)



The stopwatch, located on the briefing-agenda, is a central part of the easyhold app and consists of 4 elements (picture 7)



After switching from the input-agenda to the briefing-agenda, the stopwatch is allocated with the precalculated times. The timing-ledge shows the next/following leg, that has to be flown. Picture 6 and 7 demonstrate an example, showing the approach-leg (entry). At the same time, easyhold marks the time, that is preallocated for this leg (here 20 seconds).

After starting the stopwatch the bygone time is presented in the progress-display. Ten seconds before reaching the leg-time, an info-display with the corresponding indication pops up, as well as an audio-output stating "turn in 10 seconds". The seconds in the info-display are counted down to 0. At the end of the preallocated time for the current leg, a request "start right/left turn now" will be issued in writing and audio,

To achieve an audio output of good quality, set the general settings on the iphone on english language.

The stopwatch can be stopped via the start/stop button and the time for the next leg will be allocated automatically. In the shown example in picture 6, this time is presented as 55 seconds (however, the agenda of the timing-ledge stays on ENTRY, due to the leg belonging to the special direct entry – picture 8)

ull 🗢 05:47 ⊌ 🕫 100 % 🖲
Coata Input Holding Briefing
Entry: Special Direct-Entry
On passing fix
MC WCA MH Time
290° 5° 295° 20s
Turn right on Outbound Course
MC WCA MH Time
20° 6° 26° <u>55</u> s
Inbound:
MC WCA MH Time
200° -2° 198° 60s
Outbound:
00:00 Start
CO Entry Outbound Inbound
Remains o

If the watch is not stopped after the end of the preallocated time, it will stop automatically after a time-sequence of 20 seconds past reaching the legtime and switches to the next leg.

After starting the stopwatch, the time is counted on to the next preallocated time and the process repeats itself with the audio and written notice being issued after 10 seconds. After the time relapsed, the stopwatch can be stopped or continued, since it stops automatically after 20 seconds and continuous with the next leg, as explained above (for example, the special direct entry is followed up by the inbound leg – picture 9)



Picture 9 shows the app layout in case of an iPhone 6s, SE 2<sup>nd</sup> gen or 8. In case of using one of these models, solely data for the inbound- and outbound leg will be presented after reaching the end of the approach process. iPhones with a broader display are capable of showing the data of the approach process as well.

Of course, an automatic switch to the following leg can be issued manually at any time by tapping on the desired leg on the timing-ledge. The time for the specific leg will be preallocated and marked on the display. The automatic switch to the following leg-times then starts again, from the desired leg onwards.

Please be aware that an activated stopwatch will be stopped automatically, if the display is switched to the input-agenda.

## Stopwatch without preallocation

easyhold also offers a conventional stopwatch, in which times and written or audio outputs are not generated. In order to use the conventional stopwatch, click on the infinity-sign.