FLIGHTBYTE COMPUTING

User manual for Codes translator

Welcome to the Codes manual. Here we will discuss:

1. Disclaimers

Put the wrong data in and you'll get the wrong data out. This is the most likely cause of error.

We've aimed to make the decoder as flexible as possible, but this may lead to some odd responses. Tell us about them!

2. Installation

2.1 Using PC connections

If downloaded, run the file to extract the contents.

If received on CD, insert the CD in a PCs CD drive,

Connect the Pocket PC to the PC.

Copy the file 'Codes CAB' to your PC using windows explorer.

In your mobile device, double-click the file 'Codes CAB' to install it.

Should your Pocket PC object to the program, that is because it is running Pocket PC 2002 or earlier. The program requires .net compact framework 2.0. It needs .net compact framework. Run .NETCFSETUP.exe.

2.2 Via memorycard

If downloaded, run the file to extract the contents.

If received on CD, insert the CD in a PCs CD drive,

Copy the file 'Codes CAB' to your memory card using windows explorer.

In your mobile device, double-click the file 'Codes CAB' to install it.

Should your Pocket PC object to the program, that is because it is running Pocket PC 2002 or earlier. The program requires .net compact framework 2.0. It needs .net compact framework. Run .NETCFSETUP.exe.

3. Overview

The package allows you to:

- locate an airfield by ICAO designator;
- turn airfield name into an ICAO designator;
- calculate local time offsets against GMT;
- decode METAR and TAF sections

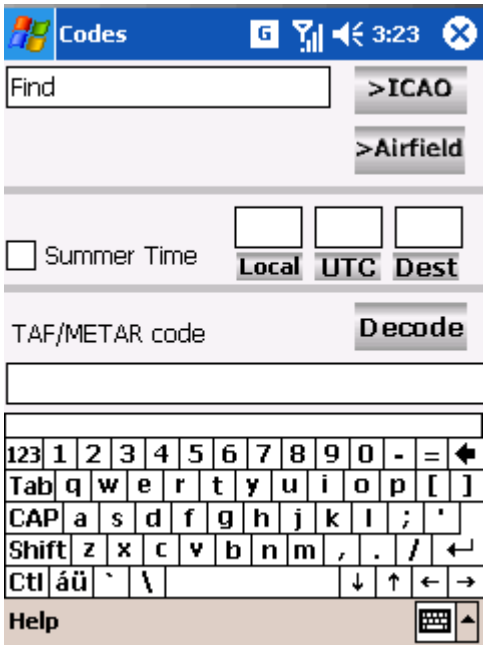
All known ICAO designators are included, as are time offsets from GMT, except for parts of Zaire, Kiribati, Kazakhstan and the Russian Federation. There are a lot of airfields in many different time zones, and we are working on placing them in the correct zone.

Updates to Airfields, ICAO designators and weather code information will be provided.

4. Using the program

When you first start the program, it may seem to hang. It is actually loading some massive data files, so give it up to 1 minute.

You will then get the main screen that gives you access to all the functions.



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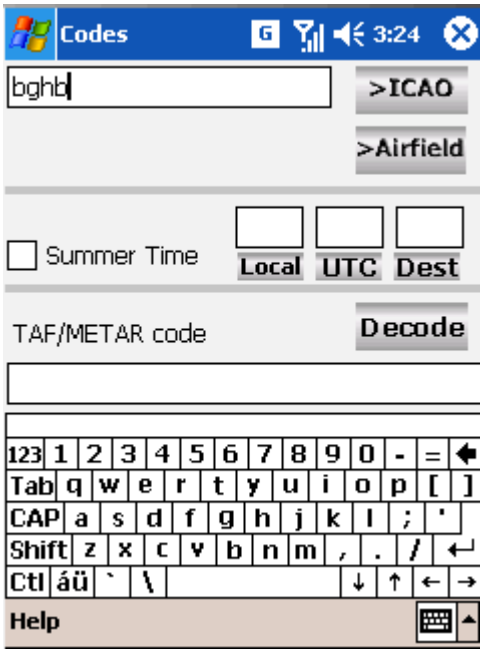
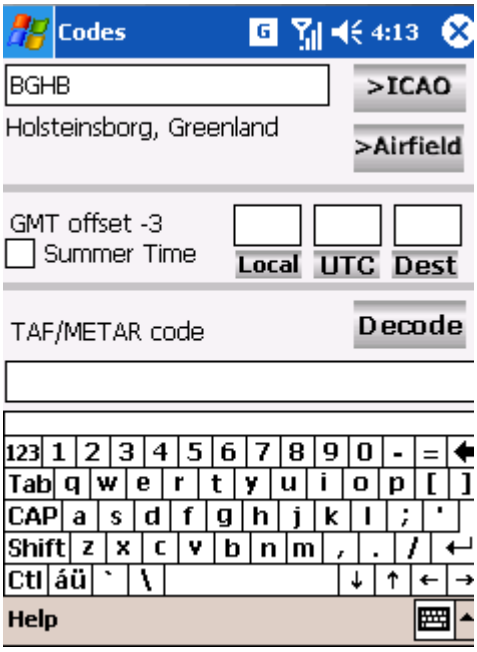
A) Decoding an ICAO designator

Nearly every licensed airfield has an ICAO designator, as do many ATC and ATSU units. These are all four digits or letters, such as BGHB or 35 LA, except for one airfield that is just three.

Enter the code and press the >Airfield button. If the ICAO code is correct, the screen will show the name and place of the location, together with GMT offset if available.

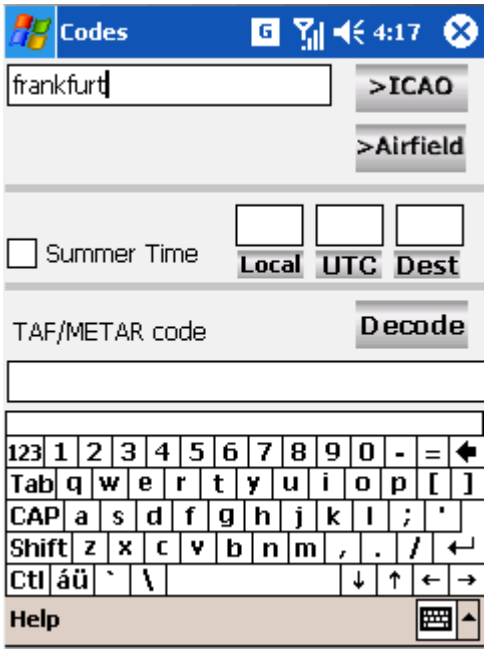




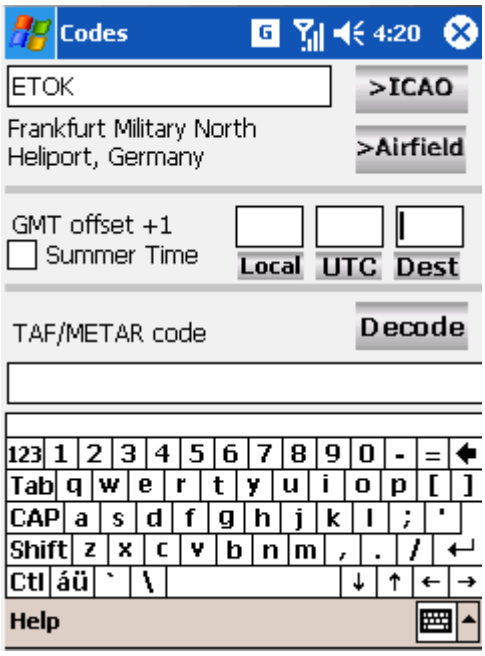
B) Finding an airfield by name

Enter the airfield or unit by place then name, eg 'London Heathrow' for EGLL or 'Frankfurt' for all locations in Frankfurt. Press >ICAO and a new screen will be presented with all the choices listed.

Highlight one and press Select



The screen will show the ICAO designator, name and place of the location, together with GMT offset if available.



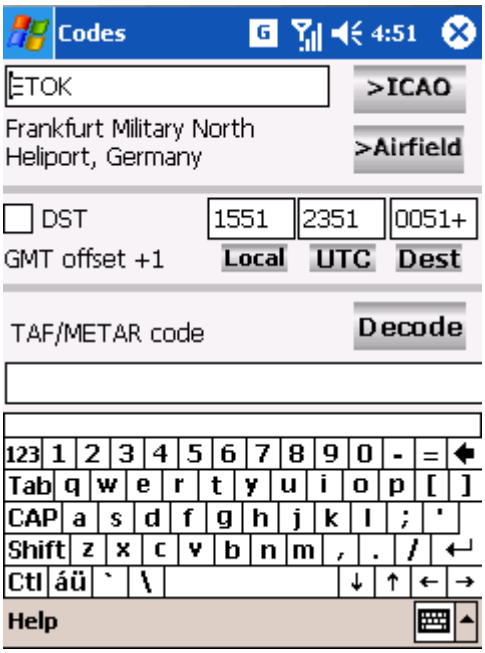
C) Working out time differences

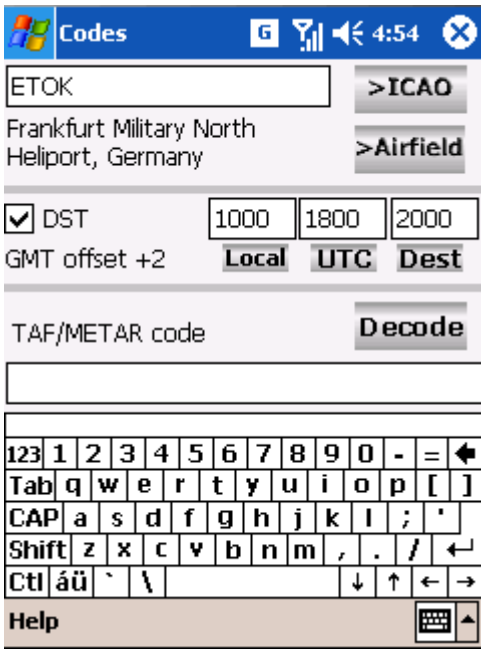
All METAR and TAF data is given in UTC, so it's handy to translate this to local destination time.

First, if summer time (DST) is operated at your location, a DST box will be displayed. Your computer knows if it is currently summer time for most locations, but if it will be Summer Time for the times that you are checking, then make sure that the box is checked.

Flightbyte Codes regards 'local' as the location setting on your device and 'local time' as the time displayed on your device.

If you leave the local time box empty and press **Local** then the current time on your device will be converted to UTC (and destination time if you have a destination selected). On the left below we see local Pacific US time converted to UTC and time at the destination in Frankfurt, Germany.





If the time at the other location is the previous day, the time will show 'nnnn -'. If it is the next day, 'nnnn+' is shown, as illustrated above.

If you put a specific time in and press **Local** then that time will be converted as shown on the right, with DST added as well.

The same applies to converting from UTC to dest and local by **UTC** and also destination to UTC and local with **Dest**

Decoding METAR and TAF

METAR and TAF reports are fiendishly complicated. Whilst we might get used to the most common codes, there are always some that catch us out, such as CBMAM or PWINO.

Standard METAR format is:

- Special report code if any
- reporting station ICAO code
- time HHMM in UTC,
- AUTO if an automatic report
- Wind
- Visibility
- Weather
- Clouds
- temp/dew
- Altimeter
- Remarks

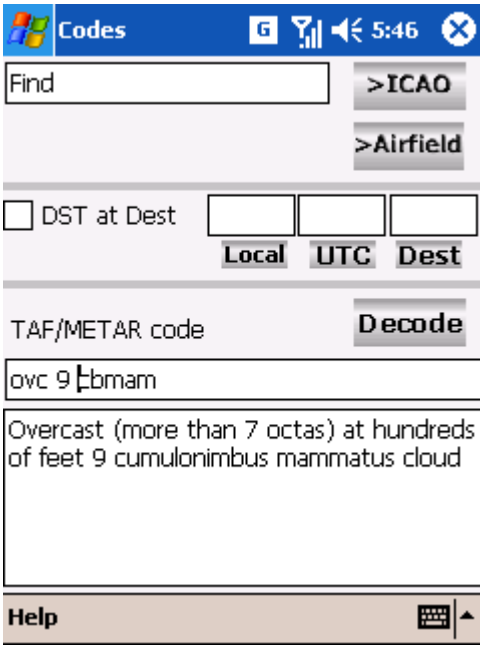
A UK pilot will recognise this as the format used for VOLMET .

And TAF format is similar:

- Special report code if any
- ICAO code for location
- Issue date/time DDHHMM: 181407z means 18th of the month at 14:07 UTC
- Validity as DDHHHH in UTC: 180604 is from the 18th at 0600z to the next 04z (ie next day)
- Wind
- Visibility
- Weather
- Clouds

You don't need to put in the whole report. Enter the parts that you are not sure about, although we don't decode pure numbers. For example 0709 comes out as 0709 while 'becmg 0709 -shra' decodes to 'becoming from sometime between z HH & HH 0709 light showers (of) rain'.

For example, enter'becmg 0709 cbmam' and press Decode



Use the time converter to work out what UTC means in local time where you are.

Loading updated databases

The package is designed to allow the databases to be updated easily.
We'll issue new databases as we become aware of new, renamed or defunct airfields, work out more UTC offsets and as we uncover even more exotic weather codes.

We'll put these on the web site. Save them to your PC and then copy them to the application directory (Usually ***program files\flightbyte***).

> To copy using Windows, connect your Pocket PC to your computer and open Windows explorer. Copy the file(s) you have downloaded. Navigate to 'my computer-mobile device' (it's at the end of the 'my computer' list). Then click on 'my pocket PC' or whatever name you gave it (it will have the pocket PC icon). Find the application directory and paste the file(s), overwriting the earlier one(s).
>
> If you are using a memory card, then copy the files to the memory card, insert in the Pocket PC and use file explorer to overwrite the previous copy of file(s).

Troubleshooting

If the answers look mad, then check what you have entered.