

CHAPTER 5

AIRSPACE AROUND WORCESTER

A) AIRSPACE

Gliding, the world-over, is continuing to loose airspace as air traffic increases. As such, the sport is at the mercy of the authorities. An infringement of controlled airspace in one area can result in the loss of even more unrestricted airspace and may have far reaching consequences for gliding in the RSA as a whole.

Worcester Airfield (FAWC) is situated geographically within, but beneath, the TMA of Cape Town International Airport (FACT). A TMA is a Terminal Maneuvering Area. It is therefore important that members understand fully the constraints of the airspace around the airfield and are fully aware of the controlled airspace restrictions.

The map and section at the end of this chapter shows the salient features of the controlled airspace around FAWC. It is included to facilitate the reading of the Aeronautical Maps and is not a substitute for them. Remember that it is mandatory for all gliders to carry a 1:1 000 000 or 1:500 000 up to date aeronautical map.

B) TYPES OF AIRSPACE

(see Map and Section – Figures ii and iii)

Airways:

W87D The coastal route, 20nm wide, is an Advisory Route (ADR) extending from FL75 to FL125.

W87 An Airway within the above ADR and extends from FL125

to FL 460. Frequency 125.1MHz

W95D An ADR – This has no airway associated with it and is overlain by UTA-B from FL145 to FL195 and UTA-A from FL195 to FL 460. Frequency 126.5MHz

UW82 North of Tulbagh. This falls within the UTA (A & B) Frequency 125.1Mhz

Prohibited, Restricted and Danger Areas:

FAP 38 **Krantzkop**, GND/2 000 AGL, south of Voëlvlei.

FAR 45 A **Langebaanweg Military Flying Area** 1 500ft AGL/FL460, freq. 122.5MHz

FAR 45 B **Langebaanweg Military Flying Area**, FL120/FL460, freq. 122.5MHz

FAR 147 **Overberg** GND/FL460, freq.119.8MHz.

FAD 157 **Worcester/Robertson General Flying Area**, roughly triangular in shape, to the south-east of Worcester and extending from GND/FL70. Frequency 124.4 MHz

FAD 159 **Ysterplaat Military Helicopter Mountain Flying Area**, square in shape, to the west of Worcester , extending from GND/1 000ft AGL, freq. 122.4MHz

Terminal Manoeuvring Area:

Simplified, the TMA consist of a 50nm radius circle centered on FACT with concentric inner circles at various radaii from Cape Town, and starting at various altitudes. Worcester lies 10km inside the outer

circle, this segment of the TMA extends upwards from FL85 to FL 115 above which is the Cape Town CTA extending to FL460, and also the Cape Town UTA. A. Frequencies are 119.7 MHz. up to FL140 and 125.1MHz up to FL460.

Special Rules Area:

An East and West Sector separated by a line through FACT Rwy 19/01 below the TMA. Worcester lies in the East Sector. This extends from Ground to the overlying TMA at FL85. The frequency is 124.8MHz.

Uncontrolled Airspace:

Outside the TMA and below the Airways or ADR's there is uncontrolled airspace for which the frequency is 124.8 MHz to 1500' agl and 126.5 MHz above 1500' agl.

Aerodrome Traffic Area:

Stellenbosch has an ATA of 5nm radius (excluding controlled airspace) from Ground to 2500' the frequency is 119.3 MHz.

Worcester Winch Restricted Area:

A block of airspace up to 3000ft amsl located over the runways. (see fig. i). *Note: This is a local restriction and is not Notamed.*

Note. Above FL195 all flying is IFR (Category A airspace). The Memorandum dated 1990-07-04 (Ref. J6/12) in which special dispensation could be granted for clearance of gliders to climb to and above FL 195 is no longer valid.

C) TRANSPONDERS

Pilots may only enter controlled airspace if the glider is equipped with a serviceable mode C “Charlie”

transponder and have been granted permission from Air Traffic Control.

Bear in mind it is not always possible for the controllers at FACT to accommodate gliders in controlled airspace due to traffic or other conditions. Glider pilots must obviously accept the controllers decision without question. Any discussion should be on the telephone by the Duty Instructor or some other senior member and not on the radio.

Radio procedure:

If you are expecting to encounter lift which will carry you through 8 500' altitude and into the TMA or through FL145 if outside the TMA, consider the following:

1. Make sure that you know how to operate the transponder *before* you take off.
2. Make sure your transponder is switched ON to ALT mode, with the pre-allocated squawk code set, and fully warmed-up *before* you reach Victoria Peak, or wherever it is that you are headed. It takes at least 10 minutes to warm up properly.
3. Radar facilities at FACT have been upgraded and it is no longer necessary to maintain a ground speed of more than 10 knots.
4. On reaching 7 500' (*the transition altitude*), re-set your altimeter sub-scale to 1013hpa (note down the original setting for later), and call Cape Town on 119.7, if you are below the TMA and freq. 125.1MHz if you are beyond

50nm from Cape Town, as set out below. – *see (9)* below.

5. Remain on the relevant ATC frequency *continuously* when in controlled airspace, never try to communicate with other aircraft on this frequency, and do not change temporarily to another frequency to chat, unless you get permission from the controller first. If he allows you off his frequency then you must advise him when you are back on his frequency.
6. Do not climb into controlled airspace before ATC have given you permission - if necessary extend the dive brakes or fly in and out of the descending air.
7. *Always* use the phonetic alphabet when talking to ATC (and others).
8. If you are permitted into controlled Airspace and you encounter radio failure, or are unable to advise the controller that you are no longer within controlled airspace, you are to squawk 7600 and leave controlled airspace immediately, and advise the relevant controller as soon as possible by some other means, telephone, relay etc.

Typical Radio Transmission with ATC

You: Cape Town approach, glider GJJ on one one niner decimal seven (119.7).
 ATC: GJJ Cape Town, (go ahead)/transmit.
 You: GJJ is two nautical miles south Worcester (or wherever), flight level eight fife (FL85), request flight level one zero zero (FL100), for fife (5) nautical mile radius Worcester.

ATC: GJJ, squawk one two zero tree, flight level one zero zero, fife nautical mile radius Worcester (call on completion) advise completed or leaving the area
 You: Squawk one two zero tree, flight level one zero zero, fife nautical mile radius Worcester, (call completion) report completed or leaving the area, GJJ (that means you must call to tell him when you have reached FL100)— Note: - you will only be expected to report at your requested FL if that was part of the controllers instruction, he would “block off” the requested piece of airspace and make the assumption that you could be anywhere within this area up to the requested FL

Now only begin to climb from FL85 to FL100.

You: Cape Town Approach, GJJ (now that you have reached FL100). – if required
 ATC: GJJ Approach (go ahead.) transmit.
 You: GJJ is flight level one zero zero, requesting flight level one fife zero for same position (or how ever high, or wherever you want to go to, this must be given as a request).
 ATC: GJJ cleared flight level one fife zero, Rawsonville only, call/report on completion.
 You: Flight level one fife zero Rawsonville only, call/report on completion GJJ.
 ATC: GJJ remain flight level one zero zero, call/report (fifteen) one fife minutes operations/ops normal.
 You: Remain flight level one zero zero, call/report (fifteen) one fife minutes ops normal GJJ.

or

While you are flying, ATC may say:

ATC: GJJ, Cape Town.
 You: Cape Town GJJ go ahead.
 ATC: Recycle squawk.

Switch the transponder off momentarily and then on again. With the Terra 250 transponder it is not possible to cycle through the numbers, so we switch off and on instead. The likely cause of ATC's request is that the radar speed filter has removed your image from ATC's screen because

you have been **flying too slowly**. Maintain a minimum ground speed of 35kph.

Or ATC may say:

ATC: GJJ squawk IDENT.

Press the ‘ident’ button on the transponder, which will enhance your image momentarily on ATC's screen.

Later, when you are descending:

You: Cape Town Approach, GJJ.

ATC: Go ahead.

You: GJJ is flight level eight five descending below TMA.

ATC: GJJ, squawk standby, broadcast on TIBA frequencies.

You: Report on TIBA frequencies GJJ.

Re-set your altimeter to the Cape Town QNH (which should be given to you by ATC) when descending down through the *transition level* (FL75) and re-set the radio frequency. Turn off the transponder to conserve power for the radio.

General Note: (Especially for Duty Pilots) –

Worcester (FAWC) is an **uncontrolled airfield**. Any aircraft calling for permission to, say, land / low- pass etc should be answered as follows: *“Call sign – this is an uncontrolled airfield – land / low-pass at your own discretion, I repeat, at your own discretion”* Never give permission – you could find yourself in serious trouble in the event of an incident.

Blind Calls: - See Chapter 2 – (Rule 6) for mandatory pre-flight and in-flight blind-calls to “Worcester Traffic”

Figure 1 – Winch Restricted Area

(Local Rule Only)



