

The ABC of the RTBA



Ministère de l'écologie, du Développement durable et de l'Énergie



www.developpement-durable.gouv.fr

Acronyms used in this publication

AIP	Aeronautical Information Publication
AMSL	Above Mean Sea Level
APP	Approach Control
ASFC	Above Surface Level
AZBA	Activity of Low Altitude Areas
CAM	Operational Air Traffic (military traffic)
DIA	Aeronautical Information Directorate
DIRCAM	Military Air Traffic Management Directorate
FIC (ou CIV)	Flight Information Centre
IGN	National Geographic Institute
NOTAM	Notice To Airmen
OACI	International Civil Aviation Organisation
RTBA	Very low altitude network
SDT	Automatic Terrain Following
SIA	Aeronautical Information Service
SIV/APP	Flight Information Sector managed by an approach
SUP AIP	Aeronautical Information Publication Supplement
VFR	Visual flight Rules



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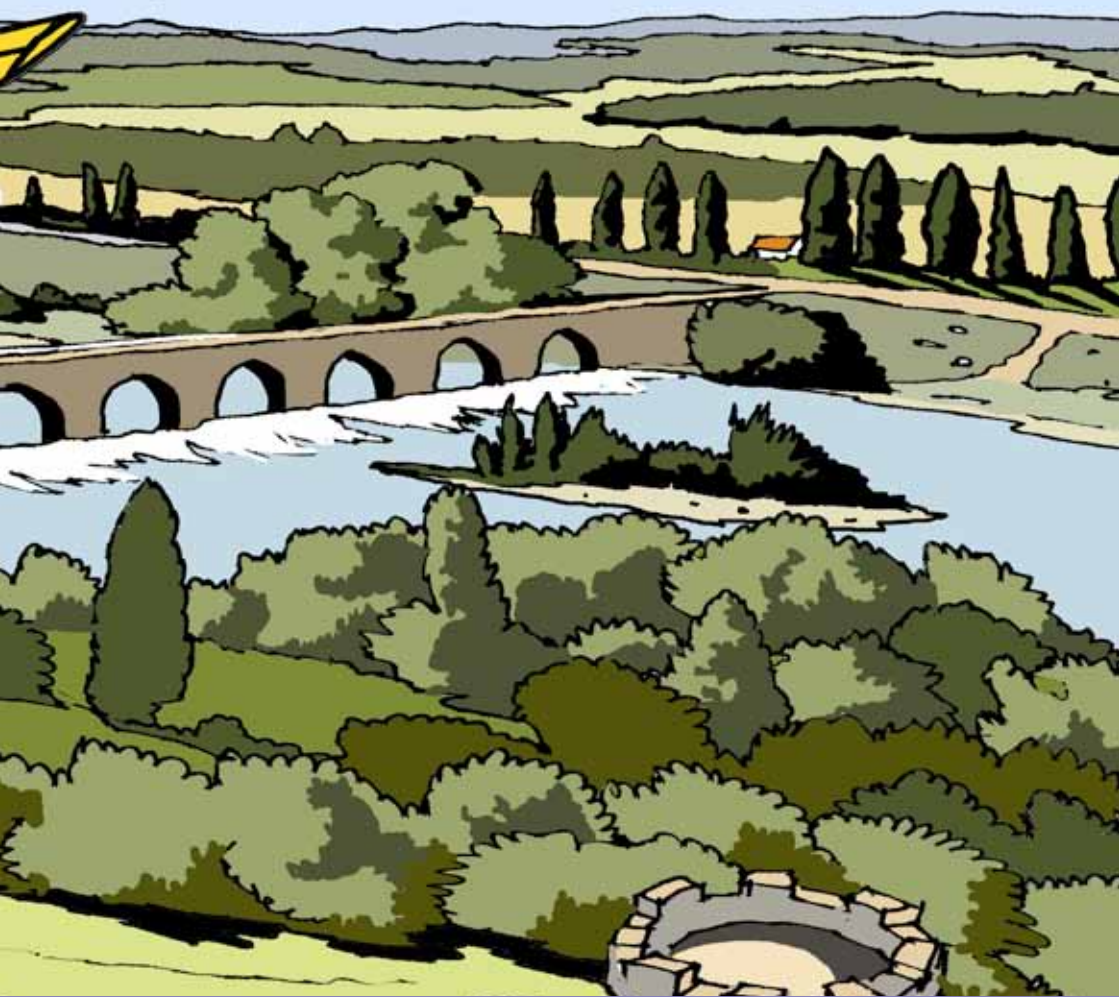
**The Importance of setting transponder to 7000
with Altitude encoder**

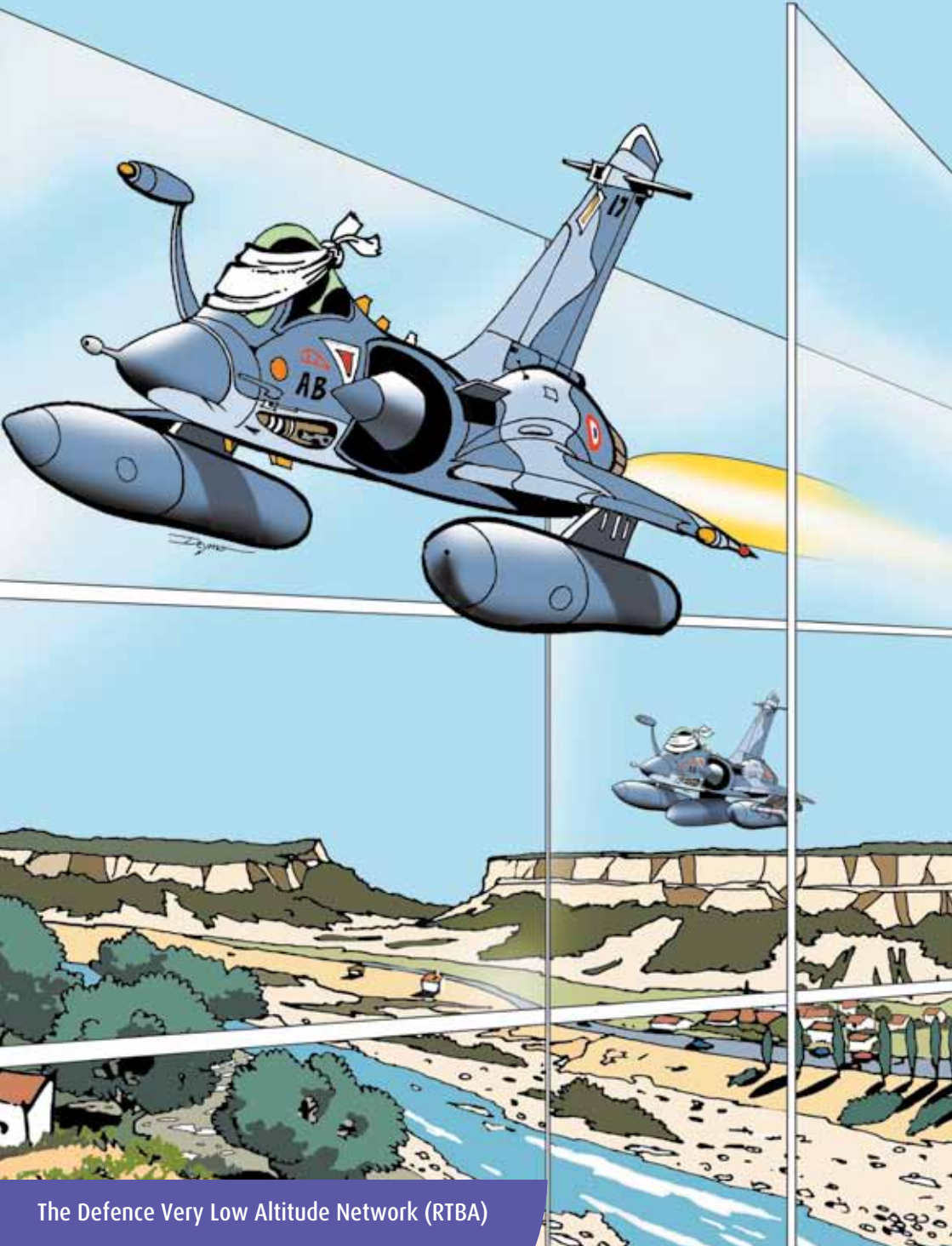
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The Defence Very Low Altitude Network (RTBA)

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The Defence Very Low Altitude Network (RTBA)

In general, military aircraft may manoeuvre anywhere in the lower airspace, particularly between 500 ft and 1,500 ft above ground, while respecting the regulations of the respective class of airspace and published zones.

However, training requirements mean that military pilots are not all the time able to avoid potential collisions, and such training is undertaken within the defence RTBA (very low altitude network).

What is the RTBA?



The RTBA is composed of a number of restricted areas that are linked and used for high-speed training at very low altitude.

The lateral and vertical limits of the respective areas (later on referred as sections) are defined in AIP Aeronautical Information Publication section ENR 5.1; information about prohibited areas, restricted areas and danger areas are provided by the SIA Aeronautical Information Service “<http://www.sia.aviation-civile.gouv.fr/>”, also in the Complément aux cartes aéronautiques supplement supplied in the VFR Folder edited by the SIA.

The different areas of the RTBA may be activated under any meteorological condition and must be avoided during the time of activation.

In general, combat aircraft manoeuvring in the RTBA will be using automated terrain-following systems providing no protection against potential collision.

The speed of combat aircraft manoeuvring in the RTBA may exceed 500 Kt (~900 km/h).

Combat aircraft in the RTBA may also fly in formation.



**ACTIVE AREA.
DO NOT ENTER.**

4200*
* I.E. FROM GROUND LEVEL
TO 4200FT AMSL.

SCALE MAP. 1
500000



The Defence Very Low Altitude Network (RTBA)

Geography of the RTBA



Lateral Limits

A paper chart showing the entire RTBA is included in the VFR Folder supplied by the SIA. An electronic version may be downloaded from the internet site operated by the Aeronautical Information Directorate of the Military ATM Directorate (DIRCAM/DIA) at: <http://www.dircam.air.defense.gouv.fr/dia/>, aeronautical chart section.

The network is also shown on the charts published by SIA (1/1,000,000 and 1/250,000), and on the IGN/ICAO 1/500,000 chart.

Vertical Limits

The vertical limits of the RTBA may be defined with reference to :

- Height above surface (ASFC) ;
- Altitude, with reference to mean sea level (AMSL).

Certain sections extend down to surface level. These are represented on the RTBA chart by a different colour. When one section of the RTBA overlaps a lower RTBA section extending to surface level, if the latter is active, so is the overhanging section.

When avoiding RTBA corridors in areas where the chart indicates high ground, as it may be difficult to simultaneously respect the minimum safe VFR altitude and fly under the base of the RTBA ; it is recommended the VFR pilot should :

- cross the RTBA flying over it when prevailing meteorological conditions allow,
- when the vertical limits of the RTBA area are given in heights above ground, pay special attention to the vertical limits of the RTBA with respect to the terrain, and adhere to this during the flight.

It should be noted that, in order to facilitate crossing of the RTBA, for each section whose upper limit is defined in height, the chart now bears an indication of the maximum altitude of the corridor for the whole section.

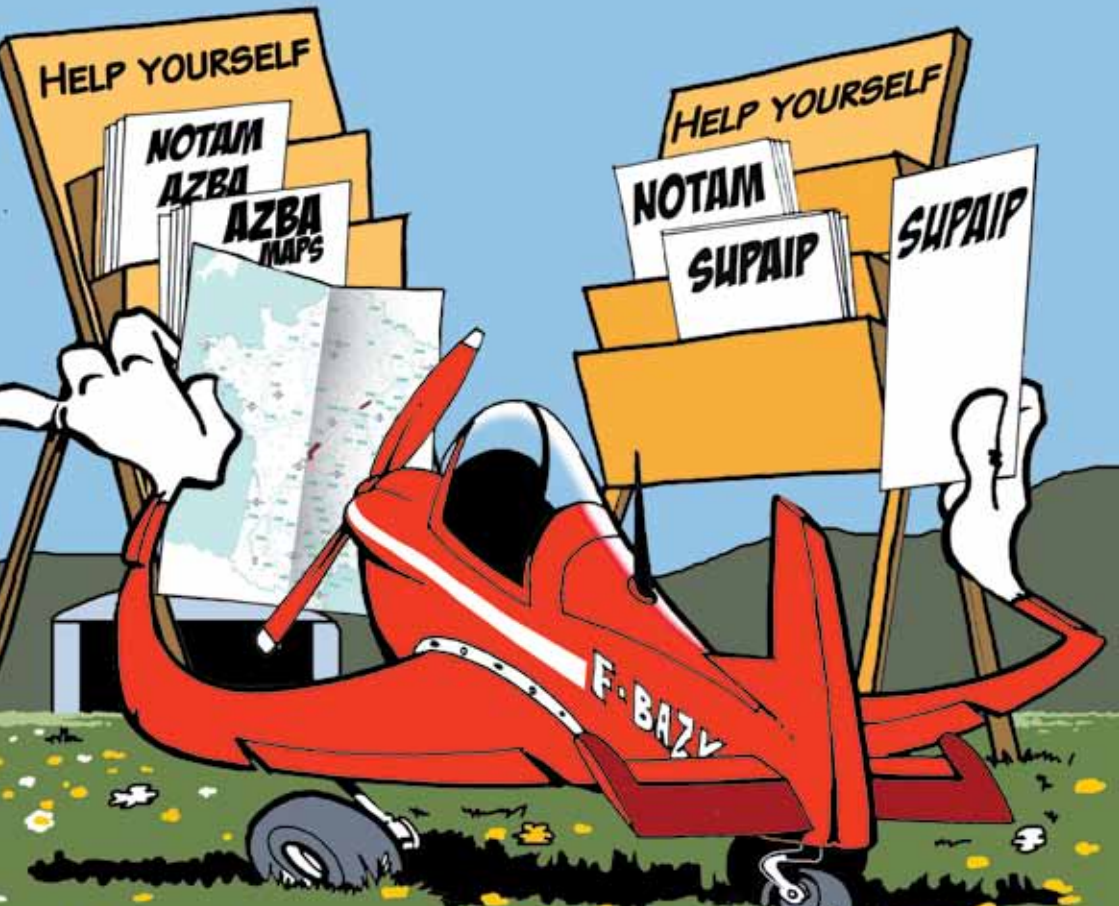
N.B. : On the 1:500,000 charts the vertical limits of the low flying sections extending to surface level are shown as follows:



On this chart, section R45B extends from the surface to 800ft above surface; it is located under section R45S3, which extends from 800ft above surface to 3,200ft above surface. The maximum height of this section is 5,600ft.

Légend:

Limites verticales	Vertical Limits
2000	De surface à 2000 AMSL. From surface to 2000 AMSL.
3500	De 1500 ASFC à 3500 AMSL.
1500 ASFC	From 1500 ASFC to 2000 AMSL.



The Defence Very Low Altitude Network (RTBA)

When is the RTBA Active?



The time slots during which the RTBA may be activated are given in the French AIP and in the RTBA chart key. The actual time slots are issued starting at 17:00 for the following day as follows:

- on the DIRCAM website under the heading “activité RTBA du jour”;
- via the green number 0800.24.54.66;
- as a NOTAM on the SIA website and on the AZBA chart;

This chart gives a diagram of the active sections for the day with time slot and is found on the SIA website under *preflight briefing, AZBA charts*.



During flight pilots may check whether or not adjacent sections of the RTBA are active by contacting and asking nearby air traffic service units, Flight Information Centre (FIC), or Approach unit managing a flight information sector (SIV/APP).

The RTBA may be subject to temporary extension outside the usual boundaries and these are notified by a supplement to the AIP or by NOTAM.

Warning : on the occasion of specific exercises, notified by NOTAM or AIP SUP, some areas re-using the airspace of RTBA sections at non standard timeslots may be created (standard time : published in the French AIP).

Therefore, in order to know the availability of the RTBA airspace, the study of AZBA NOTAMs and AZBA charts shall be completed by the reading of NOTAM and AIP SUP published elsewhere.



Two other military traffic at one o'clock

F-BATH

The Defence Very Low Altitude Network (RTBA)

Military Aircraft traffic in Class G Airspace



For training purposes military aircraft fly singly or in formation at very low altitude, in particular in **uncontrolled airspace**. Exercises are flown outside the RTBA and represent the vast majority of military flights at low altitude.

For technical reasons or due to handling characteristics, jet aircraft cannot limit their speed to less than 250 Kt VI (~460 km/h) when manoeuvring at less than 10,000 ft. They generally manoeuvre at much higher speeds.

Most of the time they operate at between 500 and 1,500 ft ASFC while respecting the rules of the different classes of airspace and other identified zones. This justifies the following advice issued by French civil and military authorities and published on SIA charts:

AVIS IMPORTANT

L'attention des pilotes est attirée sur le fait que, durant le jour et au-dessus du territoire français, la plupart des vols d'avions d'armes à basse altitude et grande vitesse sont effectués en dessous de 1500 ft ASFC durant les périodes suivantes : LUN -VEN sauf JF, SR - 30 à SS + 30.

En conséquence, il est recommandé aux pilotes VFR, pour autant que cela soit possible et permis, de conduire leur vol en croisière à partir de 1500 ft ASFC

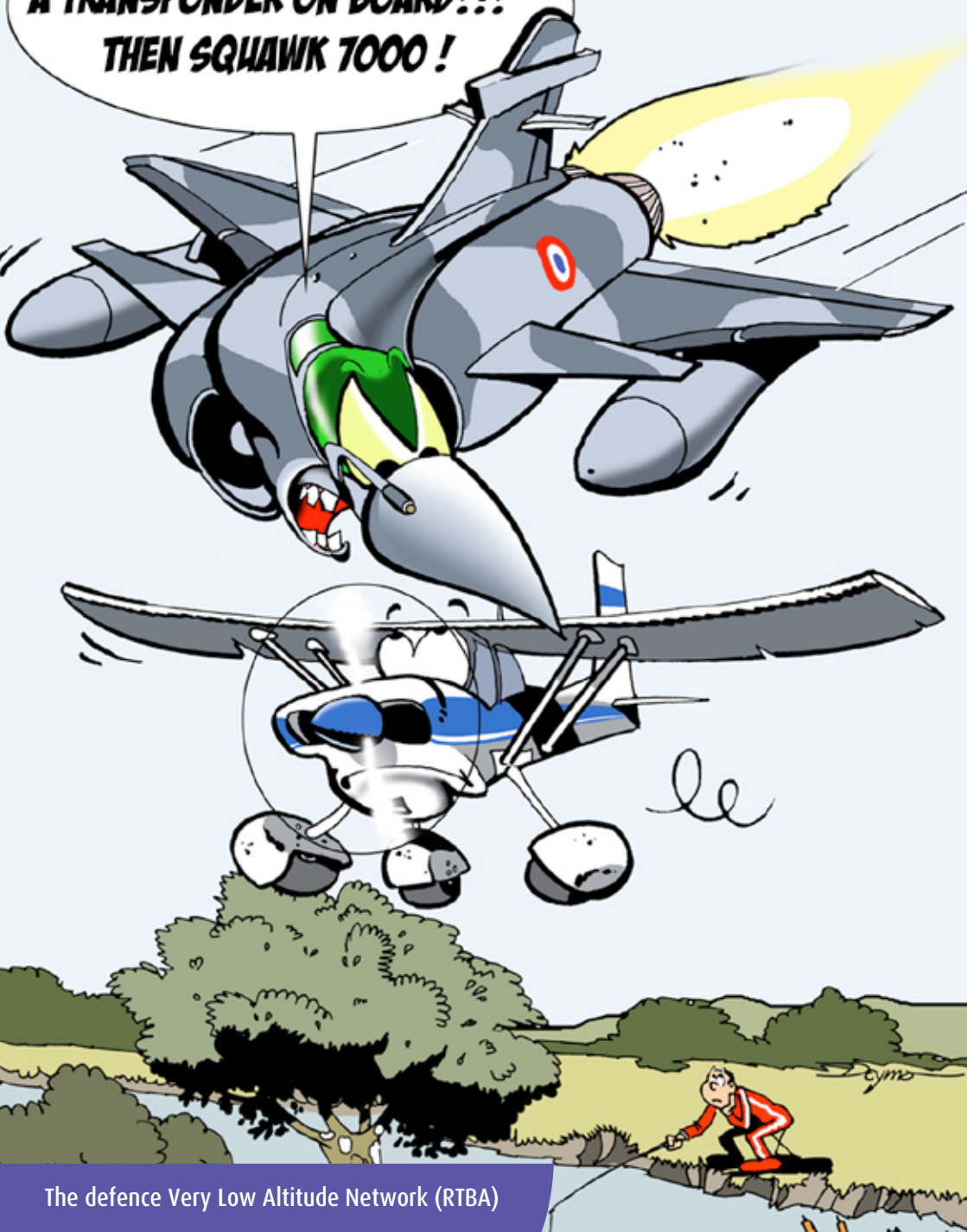
WARNING

Most high speed low altitude military flights are carried out on French territory below 1500 ft ASFC from MON to FRI (except on public holidays), from SD - 30 to SS + 30. Therefore, VFR pilots are advised to cruise above 1500 ft ASFC whenever possible and allowed.

The same advice is printed on Jeppesen VFR/GPS maps for all European countries.

When a section of the RTBA is inactive, the airspace is regarded as being Class G. Nevertheless, during such time slots fighter aircraft may be encountered in such uncontrolled airspace and the standard 'see and avoid' rules apply to all traffic.

**YOU HAVE
A TRANSPONDER ON BOARD?!?
THEN SQUAWK 7000 !**



The importance of setting Transponder Code 7000 with height altitude encoder C



In mainland France, transponder equipment is not mandatory unless instructed by Air Traffic Control authorities. Any aircraft pilot flying under VFR equipped with transponder codes A + C, or Mode S with altitude encoding, should set Code 7000 from the beginning to the end of the flight and activate the altitude encoder (see RCA 3 § 10.4.2.1.3.2, on SIA internet website).

Such action will allow military air traffic controllers to alert military aircraft using the RTBA about the presence of VFR traffic manoeuvring in the vicinity of the network.

In brief ...

When flying at low altitude, always bear in mind the possibility of military aircraft flights. Such activity is found in segregated airspace such as the RTBA, which is to be avoided at all costs when active, but also outside of segregated airspace.

In order to ensure your own safety, please:

- refer to adequate charts (*see page 7*),
- check the activity time slots (*see page 9*),
- keep a constant lookout (*see and avoid*),
- set your transponder to 7000.



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