

Special VFR

Most of us should be familiar with the VFR meteorological minima associated with operating an aircraft in a control zone, below which we must have a Special VFR (SVFR) clearance. Sometimes, however, it is not clear if air traffic control (ATC) are obliged to issue this clearance or whether the pilot must request it. In this article we explore this question and look at what operating under a SVFR clearance means to you as pilot in command.

What is SVFR?

A Special VFR clearance allows you to perform a VFR operation within a **control zone (CTR)**, provided certain conditions are met, in weather conditions that are less than the VFR meteorological minima prescribed for that airspace.

When Does SVFR Apply?

A controller will issue, or you can request (this point is discussed later in the article) a SVFR clearance to operate within a CTR when the weather conditions fall below the minima outlined in the accompanying tables.



What Does Being SVFR Mean?

While being cleared SVFR allows you greater flexibility to operate when conditions are below those required for normal VFR operations, it does have some restrictions attached to it. To comply with these the flight must be conducted in the following way:

- Clear of cloud.
- By day only.
- In an aircraft that is radio equipped.
- In compliance with any ATC clearances and instructions.
- With a cloud ceiling of not less than 600 feet and a visibility of no less than 1500 metres. Note that helicopters may operate below these minima provided that they comply with some additional criteria, which are outlined in rule 91.303 *Special VFR weather minima*.

Compliance with the above criteria does not, however, mean that you will automatically be granted a SVFR clearance. Air traffic control have additional separation requirements that apply between SVFR and other aircraft, and they may decline a request to operate SVFR in times of high traffic density

VFR Meteorological Minima within a CTR		
Airspace	Distance from Cloud	Flight Visibility
Class C or D Control Zone	2 km horizontally 500 feet vertically	5 km

VFR Met Minima at Aerodromes within a CTR		
	Cloud Ceiling	Flight Visibility
Day and Night	1,500 feet	5 km

(particularly when IFR traffic is on instrument approach or departure). It should also be stressed that a SVFR clearance is **not** an authorisation to operate below the minimum legal height for VFR flight, and it should never be used as an excuse to 'push the limits' a little further. It is simply a clearance that allows you to continue operating in a CTR below visual meteorological conditions (VMC), but within more stringent parameters.

If you wish to transit a control zone SVFR, you should relay an ETA for the selected entry point to the aerodrome controller five to ten minutes before reaching that point. That way your request is more likely to be granted when your aircraft reaches the CTR boundary.

SVFR Clearance – Issued or Requested?

Recent reports suggest that there is some confusion as to whether the onus is on the controller to pass a SVFR clearance to the pilot or whether it is part of pilot-in-command responsibility to request one.

Controllers are required to ensure that they **pro-actively** pass a SVFR clearance to pilots when they know that aircraft are operating in conditions below VMC. This means passing an amended clearance to **all** aircraft operating within the CTR that are affected by deteriorating weather.

On the other hand, there are occasions when a controller will be unaware that weather conditions have deteriorated, or that the aircraft wishes to operate closer to cloud than VMC, and will not know to issue a SVFR clearance. Aerodrome controllers sometimes can't accurately determine what the weather conditions are at the extremities of the CTR, and they rely on pilot reports to form a picture of what is actually happening.

The pilot in command must accept ultimate responsibility for the safe and legal operation of the aircraft. Pilots should request a SVFR clearance when they suspect that conditions have fallen below VMC, or they wish to operate closer to cloud than VMC, and when ATC have not already issued a SVFR clearance. There is no excuse for not requesting one when it is obvious that SVFR conditions apply.

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Summary

For pilots, determining if weather conditions are above VMC during the course of a flight can, at times, be difficult – especially when they are fluctuating. We suggest that if conditions do begin to change during the course of a flight, and you are in some doubt as to whether they are above VMC, that you request a SVFR clearance. That way you remain legal, and the controller becomes aware that conditions have deteriorated

and applies the required separation between you and other aircraft.

If you are a controller, recognise that not all pilots will request a SVFR clearance when conditions require them to do so. Utilise pilot reports and weather information to determine if conditions warrant SVFR within the CTR, and pro-actively pass a SVFR clearance if you consider it to be appropriate. ■



Letters to the Editor

Standard Overhead Joins

I write to express the concern of many of our members regarding non-compliance with the standard circuit procedures at unattended airfields and your confusing article in the July/August 1999 issue of *Vector*.

It is our observation, over a number of years, that many incidents could have been avoided if the basic circuit joining procedure was adhered to. These incidents have occurred at fly-ins, Safaris, RNZAC competitions, and at low-density traffic airfields.

I note that in a recent Marlborough Aero Club newsletter they plainly stated that the standard lefthand 1500-foot agl overhead join shall be complied with. Even in places like Paraparamu, what is wrong with the standard rejoin? Everyone knows where aircraft are likely to appear from? It is imperative that a uniform procedure is worked out and made mandatory if the present rejoining procedure is going to be tampered with or is no longer a requirement.

We have always admired your publications and efforts to improve pilot safety, but the article just fudged and confused this very important safety issue.

The following is part of an article printed in the May 1999 issue of the AOPA magazine:

One of the first things taught to a student pilot is the correct way in which to depart and rejoin the circuit pattern. The reason is very basic – to avoid a mid-air collision. As one of my first instructors bluntly stated, "Do everything possible to avoid a mid-air because it will be your last!" So why do pilots tend to 'switch off' after leaving a controlled environment?

Surely it is commonsense to join at 1500ft agl? The reasons shouldn't need to be mentioned, but to refresh memories: to observe the wind direction, runway in use, traffic in circuit, to give time to plan descent on the non-traffic side, and to make visual contact and identify with the transmissions of other aircraft in the circuit.

A joining aircraft flew straight in at 500 feet for the active runway and failed to make visual, or radio, contact with another aircraft, which was established in the circuit turning onto final at the same height. Positive evasive action had to be taken by the instructor in the circuiting aircraft to avoid a mid-air collision over a built up area!

Other reported incidents of non-conforming circuit rejoining procedures involved a high-performance twin and a turbine helicopter. Both of these pilots displayed a remarkable amount of very poor airmanship and common sense. If these simple procedures had been adhered to these hazardous incidents would not have occurred.

C. James McKenzie
AOPA
November 1999

Vector Comment

Thank you for your letter on this important topic.

We certainly agree that a better understanding of, and adherence to, the standard overhead join by many pilots would reduce the number of incidents at unattended aerodromes around the country. Poor airmanship (or human factors) and a lack of common sense are often factors in a great proportion of joining incidents, as you point out.

The *Vector* article that you refer to was intended to make pilots think about whether the overhead join is **always** the safest way of conforming with an aerodrome's traffic pattern when opposite-direction operations are taking place. It did not intend to discourage pilots from using what is a tried and tested procedure. In fact, it emphasised that the standard overhead join is appropriate at the majority of unattended aerodromes most of the time.

Our research prior to writing the article indicated that there are a number of unattended aerodromes around the country (eg, Paraparamu, Ardmore, North Shore, and Masterton) where conducting an overhead join while opposite-direction circuits **are in use** could be dangerous.

Paraparamu probably best illustrates the dangers, as it often has gliders and tugs operating in a contra-rotating fashion to powered fixed-wing aircraft. Joining overhead in such a situation would not only mean letting down on top of other traffic, but also could result in a head-on collision with another aircraft already established in the downwind of the opposite-direction circuit.

We take your point about the dangers of joining straight-in, but these are probably less than those associated with letting down on to the active side of a circuit pattern, provided that the pilot ensures that such an approach does not conflict with another aircraft already established in the circuit. We advocate that if a pilot has any doubts about the whereabouts of other circuit traffic that they should remain clear of the circuit pattern until they can safely re-sequence themselves. Joining downwind is certainly preferable to a straight-in approach – a point that we could have expanded on more in the article. It is important to note that joining the circuit directly has certain conditions associated with it (which were not met in the incident that you quote).

We feel that, provided a pilot maintains a good lookout, listening watch, situational awareness, and makes appropriate joining calls, the risks of an incident are small. We don't think that there is any easy answer that can be uniformly applied to the many different situations that occur at unattended aerodromes. The answer would seem to be the application of a 'common sense approach' (based on the standard overhead join) and sound airmanship by pilots. Encouraging pilots to let down into an active circuit traffic pattern would be contrary to this philosophy. ■