C4/1-13 The Gateway
Broadmeadows
Victoria 3047 Australia
Phone +61 (0) 3 9359 9865
Fax +61 (0) 3 9359 1613

The Gliding Federation of Australia Inc.

Operations

Operational Safety Bulletin

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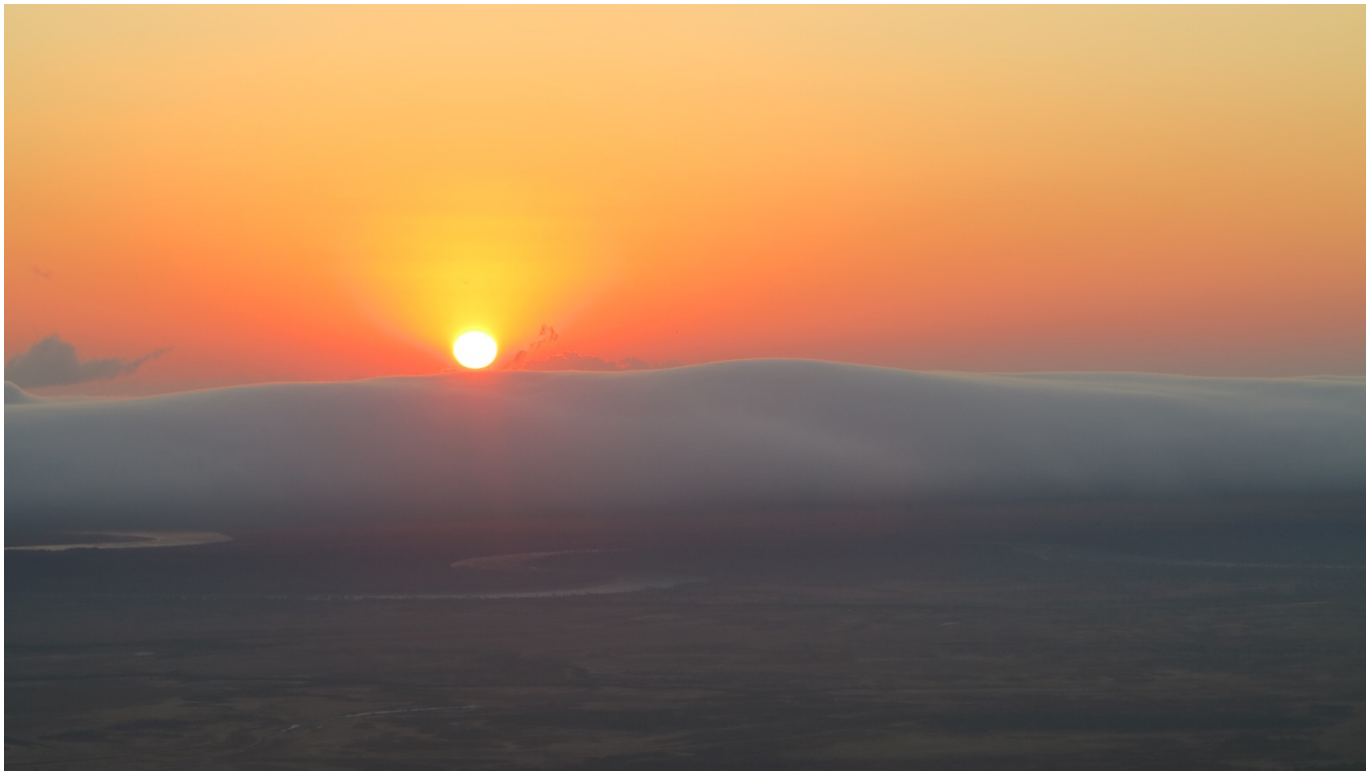
Flying the ‘Morning Glory’



The Gulf of Carpentaria is home to one of the world's most extraordinary meteorological phenomenon, the Morning Glory Cloud. One kilometre high stretching from horizon to horizon the "Glory" is a shockwave in the atmosphere of immense proportions.

Ever since the Glory was first flown by Robert Thompson and Russell White flying a G109 in 1989, dozens of pilots from various forms of general and recreational aviation have ventured to Burketown in Qld to share in the adventure.

Burketown is a Certified and security controlled airport and glider pilots must ensure they are familiar with the operating procedures peculiar to these types of aerodromes. What you may be accustomed to at your home airfield may not apply at Burketown. An example is that gliders cannot be marshalled while awaiting a launch unless special procedures are in place.

The following guidance notes have been prepared with the assistance of Robert Thompson (Sydney Motor Glider Flight Group), Kevin Saunders (Regional Manager Operations, WA) and several other GFA members who have flown the ‘Glory’ to highlight some of the issues facing motor glider pilots flying into, and operating from, the Burketown aerodrome.

Traffic Mix

If you fly long trips to Burketown or other outback places you will often be operating at the same aerodromes and in the same airspace as commercial flying operators. There could be a Qantas 737 in the circuit with you at Mount Isa, or a Skytrans Dash 8 flying into Burketown. When you include all the other charter and commercial operations that ply their trade around the outback, the airspace can be quite congested.

You will mostly encounter the larger commercial flights in the CTAFs but they often hop around outback towns quite low. The commercial flights operate at IFR cruising levels (refer AIP ENR 1.7 Section 5), so take particular care as you are climbing or descending through these levels. If you are in touring mode, maintain VFR levels; i.e. heading 0-179M, use odd numbered thousands plus 500ft (e.g.3500ft, 5500ft etc.); and heading 180-359, use even numbered thousands plus 500ft (e.g. 4500ft, 6500ft etc.).

Watch out for large areas of smoke from bushfires as this can seriously reduce visibility. Even if the conditions meet VFR requirements smoke haze can make seeing and avoiding the regional traffic difficult. In these conditions it is recommended you monitor the local area frequency and respond to traffic calls as required.

Aerodrome Procedures

You must be familiar with aerodrome circuit, airways and radio procedures. It is highly recommended pilots make themselves familiar with the following documents:

- CAAP 166-2: Pilots' responsibility for collision avoidance in the vicinity of non-towered (non-controlled) aerodromes using 'see-and-avoid'; and
- CAAP 166-1: Operations in the vicinity of non-towered (non-controlled) aerodromes
- GFA Airways & Radio Procedures manual.

When flying at Burketown (or any other airport):

- Don't get complacent and treat it like a "Gliding Club" strip. There is no gliding club based at Burketown and there is no one "in charge'. All pilots in command of gliders are expected to be Level 2 Independent Operators and to act accordingly. Other recreational pilots flying ultralights, microlights, hang gliders, etc. also fly the Morning Glory so co-operation is necessary.
- Don't park inside the gable markers. Gliders cannot be marshalled inside the active runway markers while awaiting a launch unless you are continuously monitoring the CTAF frequency and transmitting your intentions as you enter the active runway.
- Always use proper CTAF procedures.
- Periodically switch over to the local area frequency once you leave the vicinity of the non-controlled aerodrome and monitor it. **Note**: The local area frequency 125.7 is not receivable below 3,000' and the radio traffic is almost entirely high level airline. There is also a change in area frequency between Burketown and Karumba.
- The CTAF frequency of 126.7 is shared between Burketown, Doomadgee, Century Mine, Gregory, Karumba, Normanton and multicom airfields in the region. Traffic flying in the area at the altitudes you will be operating at are on this frequency. It is recommended that all gliding traffic use the CTAF frequency when in the vicinity of Burketown and to switch to the gliding frequency once established on the cloud. **Note**: Occasionally the cloud goes right over Burketown. As the cloud is very visible and moving quite quickly, it is suggested that a pilot with dual radio be designated to make a broadcast on the CTAF to the effect that there is a group of gliders following the cloud monitoring 122.9.

- Advise Air Services that you are conducting gliding operations and advise them of your plans.

Flying Enroute

During the peak of the ‘glory’ season, there is a lot of traffic of different performance levels. Alerted see and avoid is essential for situational awareness. Therefore, if you stop to thermal enroute to the wave, periodically give an "all stations" call with position, destination and the height band you are working.

Radio Protocols

If you have a radio capable of monitoring two frequencies, monitor both the area frequency and CTAF. The primary frequency should be the one for the airspace you are occupying. When on the area frequency give appropriate positions calls but take care not to clutter up the channel. These calls are recorded, so if you go missing they will assist in locating you. Remember, used properly a radio in a glider is a very distinct asset. Used indiscriminately, it is a pest.

Remember, don't get all wound up about sounding like a "professional" on the radio. Nobody cares what you sound like; they just want to know what you are doing and where you are. Just tell them in plain English and if there is something you don't understand just ask.

If you are operating with a group of gliders and want to chatter on the glider frequency, nominate one pilot to deal with Air Services and other traffic. The best choice is the pilot with a dual frequency radio who can monitor the local area frequency as well as the gliding frequency. Then the rest of the group can chatter away on the gliding frequency. If no one has dual frequency monitoring you should nominate one pilot to periodically change back to the area frequency and advise Air Services of what's happening.

If you are operating on a gliding channel, change back to the area frequency well before you arrive at the CTAF. This will give you an idea of the other traffic around.

Soaring the ‘Glory’

Treat the Morning Glory like ridge soaring as the same rules of right of way apply. Most fast runs will be towards the north-west, with your right wing on the cloud. The glider with the cloud on its right has right of way, and the other should break away. The glider with the cloud on its left should travel further out, allowing oncoming gliders to pass.

AT BURKETOWN IN 2012, A COLLISION IN CIRCUIT BETWEEN A DASH 8, WITH 40 PEOPLE ON BOARD, AND AN ULTRALIGHT AIRCRAFT WAS NARROWLY AVERTED. THE CAUSE WAS POOR RADIO PROCEDURES BY THE ULTRALIGHT PILOT RESULTING IN A BREAKDOWN OF ALERTED SEE AND AVOID PROCEDURES.

Again, good communication is essential. As Russell White mentions on his website, he has found that by transmitting GPS distance & radial from Burketown along with altitude & direction, pilots have no trouble locating one another and maintaining separation.

Fuel Management

It is possible to get some very long rides on the glory, so plan your fuel management well. It is also worth noting that there is often not much lift behind the Glory to soar back on, so fuel will be vital to allow you to reach home.

Outlanding

As with a great deal of the outback the Gulf has large areas of low scrubby country. Along the route the Glory will take you, the main outlanding options are:

- The extensive salt flats that run along the coast. While there is usually plenty of space to land, care must be taken not to land where the tidal water has recently been. The surface can be dry but a few centimetres down it is just mud. These areas look smoother than the surroundings that have a windblown look. Check with the locals for when the last big tides occurred.
- Roads. There are not many of these around but keep an eye out for the wider sections with no close scrub, and land between the white side marker posts; these days the posts are flexible and if you clip them you will just lose some gelcoat off your wings.
- In the scrubby areas you will often see shallow depressions where lakes form in the wet season. By late dry season these are firm and can be an option in the absence of better options.

Between the salt flats to the north-east of Burketown, and the Doomadge Road to the west and the Gregory Road to the south west is a large scrub area with almost nowhere to land. If you are absolutely sure that the Morning Glory is going to remain strong you can safely traverse this country but don't get stuck in this area in a dying glory.

It is recommended that pilots take appropriate survival gear (e.g. water, handheld radio, PLB, signalling mirror, survival rations, first aid, etc.), and review the Google satellite imagery to familiarise themselves with the country, the towns and the roads before they embark on this adventure.

Christopher Thorpe
Executive Manager, Operations

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