

Airspace management above Kakadu National Park

Preamble

This Fly Neighbourly Agreement is made between aircraft operators, the Regional Airspace and Procedures Advisory Committee, and the Director of National Parks (the Director) to abide by specified procedures when operating in the airspace above Kakadu National Park (the park) in the Northern Territory of Australia. These procedures include minimum heights for aircraft, avoidance of specified localities and adoption of recognised scenic routes in order to help achieve park management objectives in relation to park amenity, tourism experience and nature conservation.

The geographic area

Kakadu National Park comprises of an area of approximately 20,000 km² between the Mary River and the Arnhemland plateau. In the context of the management of park airspace the salient features of Kakadu National Park are as follows (see accompanying map):

- Most of the Park is relatively flat or undulating woodland, generally less than 200 feet above mean sea level. In the north there are extensive [floodplains and wetlands](#) associated with the Alligator Rivers. This [lowland](#) part of the park contains most of the park's infrastructure and major tourist destinations.
- The remainder of the park, its east and south-east sectors, is a portion of the Arnhemland plateau known as the [stone country](#). Most of this plateau is about 1000 feet above sea level and is separated in most parts from the lowland areas by a distinct escarpment. This area has minimal infrastructure and is managed for its conservation values as a very low impact zone, used by small numbers of visiting bushwalkers and by local Aboriginal people for hunting and ceremonies.

Matters of concern to the Director of National Parks

[Kakadu National Park](#) is a Commonwealth reserve established under the [Environment Protection and Biodiversity Conservation Act 1999](#) (the EPBC Act). The [Director of National Parks](#), a corporation sole established under the EPBC Act, administers, manages and controls the park in accordance with the provisions of the EPBC Act, the [Environment Protection and Biodiversity Conservation Regulations 2000](#) (EPBC Regulations) and the [Kakadu National Park Management Plan](#).

Under the EPBC Regulations ([r.12.36](#)) commercial flights operated over the park up to 3000 metres above sea level (other than flights on approved flight paths to or from an airport) are deemed to be carried on in the park and need to be authorised by a permit or the management plan. The management plan authorises aircraft to be operated for commercial purposes such as scenic flights in the airspace over the park without a permit provided the activity is undertaken in accordance with the Fly Neighbourly Agreement.

The EPBC Regulations ([r.12.58](#)) also prohibit landing, taxiing and take-off of aircraft in the park except in an emergency, or in accordance with a permit issued by the Director or in an area that the Director determines may be used for that purpose. At this time no such area has been determined. The definition of 'aircraft' in the EPBC Act includes any apparatus that can derive support in the atmosphere from the reactions of the air, such as gliders, hang-gliders, para-

sailers, parachutes and similar equipment, as well as conventional fixed and rotary wing aircraft.

The [Kakadu Board of Management](#) makes decisions relating to the management of the park that are consistent with its management plan and, in conjunction with the Director, prepares management plans, monitors management and advises the [Minister for Environment Protection, Heritage and the Arts](#) on all aspects of the future development of the park. The Director and Commonwealth agencies must give effect to management plans in operation for Commonwealth reserves.

The Kakadu National Park Management Plan requires the Director to promote the Fly Neighbourly Agreement, first established in 1994, among providers of air transport services, and to review it regularly as required.

Kakadu National Park is jointly managed with its traditional Aboriginal owners and is first and foremost a home for local Aboriginal people. Tourism based on the park is a significant contributor to the local and regional economies, and provides business opportunities for many local Aboriginal people.

Low flying by sightseeing aircraft has the potential to compromise park amenity, for example by intrusions of low flying aircraft disturbing people concentrated at park features or residential areas. It may also compromise conservation objectives, for example through disturbance to animals arising from the noise or air turbulence caused by aircraft.

The opportunities for aircraft operators to vary an operation to reduce such impacts include:

- the number of operations
- the heights of operations
- flight tracks used, including the avoidance of sensitive areas and the repetitive use of particular tracks
- the origins and destinations of operations
- times of operations
- operating procedures available to the type of aircraft in use
- changing the type of aircraft used.

Matters of concern to aircraft operators

The overall management of Australian airspace is directed by the [Civil Aviation Safety Authority](#) (CASA) as constituted under the [Civil Aviation Act 1988](#). In exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration. Subject to this requirement, CASA must exercise its powers and perform its functions in a manner that ensures that, as far as is practicable, the environment is protected from the effects of the operation and use of aircraft.

The [Office of Airspace Regulation](#) is a small but distinct unit within CASA. It is responsible for regulating Australian airspace in accordance with the [Airspace Regulations 2007](#) and to meet the Australian Government commitment expressed in the [Australian Airspace Policy Statement \(2007\)](#), to:

- ensure that Australian airspace is administered and used safely
- ensure that Australian airspace is used efficiently and that, where possible, there is equitable access to our airspace for all users of that airspace
- meet Australia's obligations as a member of the International Civil Aviation Organization (ICAO)
- be recognised as world's best practice

- best meet Australia's needs.

The Office of Airspace Regulation considers draft [Fly Neighbourly Agreements](#), before they are signed, in regard to related aviation issues and consults with [Airservices Australia](#) as a part of this process.

[Regional Airspace and Procedures Advisory Committees](#) (RAPACs) are primarily state-based forums for discussion of all matters relating to airspace and related procedures in Australia, and specifically in their areas of responsibility. RAPACs may be suitable forums for consulting with aircraft operators about Fly Neighbourly Agreements.

Kakadu National Park is world-renowned tourist destination. The park is readily accessible by air from aerodromes at Jabiru and Coinda, both of which are within Kakadu National Park. A number of aircraft operators run commercial scenic flights from these aerodromes, and increasingly from Darwin and Katherine, to provide opportunities for tourists to experience Kakadu's unique and spectacular landscape from the air. Much of this landscape is difficult to access from the ground.

Aircraft operators aspire to maximise the experience of airborne tourists while avoiding adverse publicity that may arise from impacts on the experience of on-ground tourists.

Private aircraft operators also aspire to be free to experience Kakadu's unique and spectacular landscape from the air.

Undertakings by aircraft operators

In order to reduce the disturbances or impact of their operations, aircraft operators using the airspace between Kakadu National Park and 3000 metres above mean sea level undertake to (unless to do so would jeopardise the safety of a flight or put a pilot in conflict with any provision of the [Civil Aviation Regulations 1988](#)):

- use the recognised scenic routes described in Schedule 3 wherever possible
- remain generally above 2500 feet above mean sea level, except when traversing lowland and floodplain areas (see map) *and* more than 3000 metres horizontally from any of the sensitive restricted areas described in Schedules 1 and 2
- remain above 1000 feet above mean sea level when traversing lowland and floodplain areas subject to Schedules 1 and 2
- remain above 2500 feet above mean sea level when traversing the plateau and escarpment landforms (see map)
- remain above 2500 ft above mean sea level or at least 3000 metres horizontally from each of the sensitive restricted areas described in Schedule 1
- during the dry season (1 June to 30 November) remain above 2500 ft above mean sea level or at least 3000 metres horizontally from each of the sensitive restricted areas described in Schedule 2
- remain above 2500 ft above mean sea level or at least 2000 metres horizontally from the Jabiru Township

Means of monitoring the agreement

Park staff on patrol will observe aircraft movements above Kakadu National Park. In addition, park staff will receive reports of breaches of this Fly Neighbourly Agreement. All suspected breaches of this Fly Neighbourly Agreement will be

reported using the park's incident reporting system and recorded, with all available evidence, on the parks incident management database.

Means by which failure to achieve the undertakings should be considered and remedied

Park staff receiving a report of or observing a failure to achieve the undertakings will report the incident to their supervisor. Senior park staff will write to the aircraft owner reminding them of their undertakings and asking if they have any justified reason for failing to achieve them. Serious or continued failures to achieve the undertakings will be treated as breaches of regulation 12.36 of the EPBC Regulations.

Emergency services

All parties to this agreement acknowledge that emergency services, including police, fire, search and rescue, and infrastructure-monitoring operations, may not always be able to comply with this Fly Neighbourly Agreement.

Review process

This Fly Neighbourly Agreement will be reviewed five years from its agreement by the parties to it, or upon the request of one or more of the parties to it.

Kakadu Knowledge for Tour Guides

Kakadu Knowledge for Tour Guides (KKTG) is a joint program between Charles Darwin University and Kakadu National Park. KKTG is a nationally accredited entry-level training program that covers all aspects of Kakadu that tour guides and pilots should know when delivering information about the Park to visitors. It includes key areas of visitor safety, understanding the park's natural and cultural values and history, minimising environmental impact and legal compliance.

While KKTG is a mandatory requirement for all ground based tour operators, Kakadu National Park strongly encourages all scenic flight pilots to undertake the program to ensure on-board commentary meets appropriate standards.

Further information can be obtained from Kakadu National Park on 08 8938 1176.

Permits for commercial flights contrary to the Fly Neighbourly Agreement

The Kakadu National Park Management Plan authorises aircraft to be operated for commercial purposes, such as scenic flights, in the airspace over the park without a permit, provided the activity is undertaken in accordance with the Fly Neighbourly Agreement. The Director of National Parks may issue a permit to conduct, for commercial purposes, flights that are not in accordance with the Fly Neighbourly Agreement. For an application form for such a permit, please contact the park.

Schedule 1

Sensitive restricted areas in Kakadu National Park

In order to reduce the disturbances or impact of their operations, aircraft operators undertake to remain above 2500 ft above mean sea level or at least 3000 metres horizontally from*:

1. 12° 10.2S 132° 14.1E Waldak Irrmbal (West Alligator Head)
2. 12° 21.7 S 132° 56.2 E Cannon Hill Outstation
3. 12° 24.8 S 132° 57.0 E Ubirr
4. 12° 26.5 S 132° 57.8 E Border Store
5. 12° 26.3 S 132° 56.9 E Merl Camping Area
6. 12° 36.1 S 132° 52.3 E Mudginberri Outstaion.
7. 12° 36.5 S 132° 39.8 E Mamukala Outstation
8. 12° 39.3 S 132° 34.2 E Mamukala Bird Hide
9. 12° 39.5 S 132° 53.5 E Jabiru Township
10. 12° 41.0 S 132° 28.9 E Aurora Kakadu Hotel (South Alligator)
11. 12° 42.1S 132° 22.9E Kapalga Outstation
12. 12° 44.0 S 132° 54.5 E Mt Brockman
13. 12° 46.0 S 132° 38.9 E Anlarr (Nourlangie Camp)
14. 12° 51.7 S 132° 59.0 E Nourlangie Rock
15. 12° 51.0 S 132° 45.0 E Muirella Park Camping Area
16. 12° 52.0 S 132° 42.3 E Mirrai (Mt Cahill)
17. 13° 01.7 S 132° 49.5 E Gubara (Baroalba Springs)
18. 12° 57.5 S 132° 35.0 E Patonga Homestead
19. 12° 56.5 S 132° 34.1 E Jim Jim Ranger Station, Airstrip Community.
20. 12° 54.0 S 132° 31.0 E Coinda / Yellow Water
21. 12° 55.4 S 132° 32.2 E Mardugal Camping Area
22. 12° 56.2 S 132° 32.1 E Paradise Farm
23. 12° 58.2 S 132° 27.3 E Spring Peak
24. 13° 30.8 S 132° 30.5 E El Sherana Mining Camp
25. 13° 35.5 S 132° 36.1 E Guratba (Coronation Hill)
26. 13° 32.7 S 132° 16.1 E Mary River Ranger Station

* unless to do so would jeopardise the safety of a flight or put a pilot in conflict with any provision of the *Civil Aviation Regulations 1988*.

Schedule 2

Dry season sensitive restricted areas in Kakadu National Park

In order to reduce the disturbances or impact of their operations during the dry season (1 June to 30 November), aircraft operators undertake to remain above 2500 ft above mean sea level or at least 3000 metres horizontally from*:

- | | | | |
|-----|------------|-------------|---------------------------------|
| 27. | 12° 35.0 S | 132° 12.5 E | Four Mile Hole |
| 28. | 12° 41.3 S | 132° 09.0 E | Two Mile Hole |
| 29. | 12° 13.1 S | 132° 48.5 E | Garnamarr Camping Area |
| 30. | 13° 16.2 S | 132° 50.2 E | Jim Jim Falls |
| 31. | 12° 19.2 S | 132° 46.5 E | Twin Falls |
| 32. | 13° 18.5 S | 132° 26.0 E | Maguk (Barramundie Gorge) |
| 33. | 13° 05.8 S | 132° 25.3 E | Gunlom Camping Area (UDP Falls) |
| 34. | 13° 17.5 S | 132° 33.9 E | Bilkbilkmi (Graveside Gorge) |

* unless to do so would jeopardise the safety of a flight or put a pilot in conflict with any provision of the *Civil Aviation Regulations 1988*

Schedule 3

Agreed scenic flight routes in Kakadu National Park

When flying any of the recognised scenic routes described below (see map) pilots must observe the conditions stipulated in [Undertakings by aircraft operators and Schedule 1 and 2.](#)

The routes should only be flown in Visual Meteorological Conditions (VMC) and should be considered dense traffic airspace. The common traffic advisory frequency of 126.7 MHz is to be used for operations at Jabiru and Cooinda aerodromes and for all scenic operations within the park airspace. Visiting pilots are urged to liaise with aircraft operators based at Jabiru and Cooinda if they intend to use the recognised scenic routes.

Route Alpha

Depart Jabiru on 070° magnetic and follow the route as shown on the accompanying map. This route is available all year round. This flight is designed to provide views of wetlands and the Arnhemland escarpment.

Route Bravo

A dry season route designed to provide views of floodplain landscapes at the time of year when waterfowl concentrations are at their densest. It is best between 30 April and 30 November. Few waterfowl are present at other times of year. Depart Jabiru on 110° magnetic and follow the route shown on the accompanying map.

Route Charlie

This route is available in the wet season only, between 1 December and 31 May. It is designed to provide views of Twin Falls and Jim Jim Falls when they are flowing and inaccessible to tourists on the ground. In the dry season little or no water flows and these places are visited by large numbers of tourists on the ground. Depart Jabiru on 140° magnetic and follow the route shown on the accompanying map.

Route Delta

This route can be flown from either Jabiru to Cooinda or Cooinda to Jabiru during the wet season only, between 1 December and 31 May. This route allows for views of the main Arnhemland escarpment including Twin Falls and Jim Jim Falls. Depart Cooinda or Jabiru and follow the route shown on the accompanying map.

Route Echo

As with Route Charlie this route is available in the wet season only, between 1 December and 31 May. It is designed to provide views of Twin Falls and Jim Jim Falls when they are flowing and inaccessible to tourists on the ground. In the dry season little or no water flows and these places are visited by large numbers of tourist on the ground. Depart Cooinda on 000° magnetic and follow the route shown on the accompanying map.

Route Foxtrot

A dry season route designed to provide views of floodplain landscapes at the time of year when waterfowl are present. Depart Cooinda on 000° magnetic and follow the route shown on the accompanying map.

Route Golf

This route can be flown from either Jabiru to Cooinda or Cooinda to Jabiru during the dry season. This flight is designed to provide views of wetlands and the Arnhemland escarpment. Depart Cooinda or Jabiru and follow the route shown on the accompanying map.

Route Hotel

This route follows a path to Jabiru and Cooinda from Darwin. This flight is designed to provide views of wetlands and the Arnhemland escarpment while transiting.

Schedule 4

Contact details for Kakadu National Park

For further information on the Kakadu National Park Fly Neighbourly Agreement or general enquires regarding Park information please contact the Park on:

Phone: 08 8938 1120 (during business hours)

Fax: 08 8938 1115

Internet: www.kakadu.com.au

Internet: www.environment.gov.au/parks/kakadu

Email: kakadunationalpark@environment.gov.au