**Unmanned balloon release – information requirements**

Please provide the following information when applying for one of the following unmanned balloon release authorisations;

**Release unmanned balloons in an approved area (CASR 101.030) and Beyond Visual Line of Sight (CASR 101.029):**

less than 100 small balloons released at the same time (CASR 101.155)

more than 100 small balloons released at the same time and less than 3nm (5.5km) from an aerodrome.

more than 100 small balloons released at the same time and more than 3nm (5.5km) from an aerodrome.

one or more light balloons (released at individual timings)

one or more medium balloons (released at individual timings)

one or more heavy balloons (released at individual timings)

This information sheet is made up of three parts:

Part A: Applicant’s details

Part B: Area Approval / Permission Details

Part C: Submission Checklist

Provision of the information referred to in this information sheet will assist in the efficient processing of any application made.

On receipt of a completed application, CASA will provide you with an estimate of the cost to assess your application and also advise whether any additional information is required to be submitted.

Upon payment of the fee estimate CASA will begin on the assessment.

If at any time you would like assistance with any aspect of your application, please contact the Sport Team by email at sport@casa.gov.au

# GUIDELINES FOR INFORMATION REQUIREMENTS

### Part A – Application Details

A1. List the name of the nominated responsible person (supervisor) including their Aviation Reference Number (ARN). This person should be onsite at the time of the balloon release (the nominated responsible person must be 18 years or older). If the responsible person, does not hold an ARN, an application can be made via the CASA website using form 1162, found via the link: <https://www.casa.gov.au/standard-page/individual-aviation-reference-number>

A2. List the business address for the organisation or address for the nominated responsible person

A3. Insert the nominated organisation (and ARN if held). A fee waiver maybe possible for educational institutions. To confirm if your organisation is eligible, contact CASA Sport Aviation.

### Part B1 – Balloon Release Details

B1.1 State the purpose of requested balloon release

B1.2 State the commencement date & duration of the area approval required (may be up to two years duration).

B1.3 State the date or dates of the requested balloon release, example: 1 day per month between 01Nov2022 to 01Feb2023

B1.4 State the times of expected release, example: 0900h or between 0900h to 1500h (local time) (& day or night)

B1.5 State the days of balloon release, weekdays / weekends / both

B1.6 State the quantity of balloon releases per event and quantity, example: 1 balloon released per event with up to 5 times a day (all released separately), or up to 300 balloons released in one event collectively.

B1.7 State the Balloon release site location in latitude and longitude (Lat/Long), in format of degrees / minute / seconds, example: Lat/Long 27°28'1.04"S 153° 1'27.95"E, Please also provide map extract images of release location.

B1.8 State the name and location of the nearest aerodrome to the balloon release site. There may be further requirements if the balloon release site or flight path will be near controlled airspace, an aerodrome with an active air traffic control tower, or a certified aerodrome. Location example: Dalby aerodrome located 20nm to the southeast.

B1.9 Balloon Release site; any location utilised for a balloon release event should have the land-owner permission.

### Part B2 Balloon Details

B2.1 Provide the ground level balloon diameter in meters decimal, example: 2.0m.

B2.2 See the balloon manufacturers specifications for burst diameter details.

B2.3 Mass of payload must be in accordance with the kind of balloon to be used, see CASR Part 101.145.

B2.4 Composition of payload: list any sensors (Barometric sensors, variometer, GPS sensor, camera/s, data link, dangerous goods).

B2.5 Housing of Payload: type of material of the case and dimensions (length, width, height, diameter etc).

B2.6 The rope, string or other device used to connect the balloon to the payload, confirm the material used allows payload separation from the balloon resulting from an impact for of less than 230N (23.45kg) (CASR Part 101.145).

B2.7 Description of Balloon: provide the mass in grams, material used and colour, example: 800gram latex white

B2.8 Parachute details: provide diameter and colour, example: white/orange 1.0 meter diameter

B2.9 provide details of camera, tracking devices, data link, radar reflectors: type of camera, size and material for radar reflector, type of GPS tracker, etc.

B2.10 Provide confirmation an identification plate is affixed to the payload, is durable, and contains required information (to ID the payload and contact details of the person who released the balloon), so the finder can contact that person/organisation who released the balloon (see CASR Part 101.195(2) (ID plate not required for small balloons with no payload).

B2.11 to B2.16 information required for medium and heavy unmanned free balloons only (CASR 101.165 to 101.230)

### Part B3 Expected Flight Path details

B3.1 Expected flight track: provide commentary of expected flight path from point to point and provide imagery of expected flight path (via google earth, Predict Habhub or similar)

B3.2 Listed expected ascent rate against balloon volume (via balloon manufacturer information)

B3.3 Expected float level: when balloon volume used will prevent reaching the altitude where balloon burst occurs, causing it to remain aloft instead.

B3.4 Expected landing point: Use same format as serial B1.5 above (can be shown via mapping software).

B3.5 Approximate balloon burst altitude given in feet (to convert meters to feet; multiple meters figure by 3.281).

B3.8 If the unmanned balloon enters a foreign countries airspace, you will need to meet any permissions required from that country

B3.9 Unmanned balloons are designated as an aircraft, as such, any time when airborne, the unmanned balloon requires person/s to constantly monitoring flight status and be available to receive phone calls, receive / broadcast VHF Airband radio requirements as needed.

### Part C - Submission checklist

For all applications, you should submit all documents listed in the checklist, as this will assist the efficient processing of this application.

NOTE - You do not need to print and submit these guidelines with your application information.

**UNMANNED BALLOON RELEASE INFORMATION REQUIREMENTS**

**Part A - Applicant Details**

|  |  |  |  |
| --- | --- | --- | --- |
| 1A. Name of the responsible person (supervisor) who will be on site at time of balloon release and their ARN: | | | |
| 1B. Name of other person/s releasing the unmanned balloon: | | | |
| 2. Address of the responsible person: | | | |
| 2A. Email address: | Contact number: | | |
| 3. Application on behalf of which organisation: |  | | |
| 4. Application type: initial / renewal / revised |  | | |
| **Part B1 - Release Details** | | | |
| 1.Purpose for the release: | | | |
| 2. Area Approval - commence date and requested duration: | | | |
| 3. Date/s of balloon release: | 4. Time/s of balloon release: | | |
| 4. days of release:  Weekdays  Weekends  Both | | | |
| 6. Number of balloons events / frequency and quantity of balloons to be released per event: | | | |
| 7. Location of release (Latitude / Longitude) and named location: | | | |
| 8. Name of nearest aerodrome, and bearing / distance to aerodrome: | | | |
| 9. Do you have landowner permission at the balloon release site: | | | |
| **Part B2 - Balloon Details** (from manufacturer’s data sheet) | | | |
| 1.Diameter of balloon at release: | | 2.Diameter of balloon at burst height: | |
| 3.Mass of payload: | | 4.Composition of payload: | |
| 5.Housing of payload – Dimensions & composition: | | | |
| 6.Does the rope or other device used between the payload and balloon meet the separation requirements? | | | |
| 7.Description of balloon / Composition: | | | |
| 8.Parachute details: | | | |
| 9.Details of any camera, tracking device, up/down link, remote cut-down capability & radar reflector: | | | |
| 10. Is the payload fitted with a durable ID information plate (CASR 101.190):  Yes  No | | | |
| **Q11 to Q17 For Medium and Heavy unmanned balloons only (CASR 101.145)** | | | |
| 11. Airservices Australia been contacted? Have they provided feedback or a Letter of Agreement?  Yes  No | | | |
| 12.The material used to attach the payload to the balloon; Does it meet the strength requirements of, able to support 10 times the mass of payload:  Yes  No | | | |
| 13. Is the balloon fitted with at-least two means of releasing the payload from the balloon:  Yes  No | | | |
| 14. Does the balloon have fitted, two independent methods to end flight if/when required?  Yes  No | | | |
| 15. Is the payload fitted with either a  radar deflector or  continuous tracking device and  SSR transponder | | | |
| 16. Day and night marking requirements met (CASR 101.190 to CASR 101.205):  Yes  No | | | |
| 17. Able to maintain communication with ATC service from the release site till flight end:  Yes  No | | | |
| **Part B3 - Expected Flight path details** (Attach supporting images, use Google Earth, Predict habhub or similar) | | | |
| 1.Expected flight track: | | | |
| 2.Expected ascent rate (*m/s or feet/min*): | | | 3.Expected float level (*if any*): |
| 4.Expected landing point (*Lat/Long)*: | | | 5.Approximate burst height: |
| 6.Approximate time interval from balloon release to apogee (*burst height*) in minutes: | | | |
| 7.Approximate time to descend in minutes: | | | |
| 8. Will the balloon flight path remain within Australian managed airspace? | | | |
| 9. Do you have person/s nominated as crew to constantly monitoring the balloon and receive phone calls / radio calls at all times whilst the unmanned balloon is airborne.  Yes  No | | | |
| 10. Is the intended release site or predicted flight path likely to be within in 18.5km (10NM) from any certified aerodrome (VHF radio requirements / stakeholder engagement):  Yes  No | | | |
| 11. Is the intended release site or predicted flight path enter any Prohibited-Restricted-Danger (PRD) area’s:  Yes  No | | | |

**Part B4 - Communications**

|  |
| --- |
| 8.Mobile phone coverage available at balloon release site and during transit to recover the payload: |
| 9.On site contact name and number that will be available for the duration of the flight: |
| 10.Any additional operational information / limitations / Safety risks: |

**Part C – Submission Checklist**

**C1** The following documentation must be submitted with this document in order to complete an application.

|  |  |  |
| --- | --- | --- |
| 1. Risk Assessment provided with all relevant operational hazards & mitigation. | Attached |  |
| 1. Provided legible photos of payload, parachute and connection device between balloon and payload. | Attached |  |
| 1. Maps, charts, images showing release location, likely flight path and likely landing site. | Attached |  |
| 1. Confirmation and or evidence of stakeholders engaged. Permissions gained as applicable | Attached |  |

**C2** List any additional documents you have provided or other information that will assist this application:

|  |
| --- |
|  |

**Giving false or misleading information is an offence under the regulations.**

|  |  |  |  |
| --- | --- | --- | --- |
| Name: |  | Date: |  |
|  |  |  |  |
| Name: |  | Date: |  |

**(please submit this document with supporting documents to sport@casa.gov.au)**