

# MAP Bronze Award Requirements

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## Retired

All versions prior to Release 1.0 are no longer to be used. Please see [ukra.org.uk](http://ukra.org.uk), or [ukra-map.org.uk/downloads](http://ukra-map.org.uk/downloads) to confirm you have the latest version.

## Introduction

This document is part of a set of documents for the award at the UKRA MAP Bronze level, there are more details on the [ukra-map.org.uk](http://ukra-map.org.uk) website.

This document contains only the tested requirements. Please see the separate guidance information document for more information and on how the assessment is done.

## Requirements to complete UKRA Bronze Award

For successful completion, the flyer needs to perform:

- All indicated core tasks
- One elective task
- Submit the records to UKRA

**We recommend that this document is printed off and carried during the assessment, though you are not required to do so.**

## Core tasks

These core tasks must be completed on the same day. Failure to complete all core tasks on the same day means that the core requirements will need to be repeated:

1. Complete a simple model rocket, as described in supporting documents
2. Complete a second flight, as described in supporting documents
3. Discuss the rocket and its operation with the assessor, or RSO

Each task is observed and recorded to the assessor's satisfaction.

## Note

- The assessor need only see the rocket preparation stage for either flight one, or flight two, not both.
- The discussion is with the flyer, not anyone assisting; please see guidance document for more details.

## Elective tasks

Select any one of the activities, it is recommended to perform this on the same day as the core requirements, though this is not mandatory. The flyer is not required to choose which elective ahead of time, they may also choose to switch electives at any time prior to the assessment:

1. Fly the same or similar rocket on a higher power motor, not exceeding 10NS in total (C-Motor). Observe the flight as described in the MAPBAG document.
2. Exchange the recovery system on the rocket for a different one and perform a successful flight. Permitted recovery options are in the MAPBAG document.
3. Carry out a construction task suitable for this level: See examples in the assessor section

Each task is observed and recorded to the assessors satisfaction:

### Notes

- For elective 1. Confirm that the flyer understands the effect of the change of engine and understands the concepts of change of altitude and the effect of any delay change. Specifics such as altitude prediction are not required.
- For elective 2. The flyer need not perform the change alone, some assistance is allowed. Expect the flyer to understand the basic operation of both the original and replacement recovery system. For example, what happens when swapping a parachute for a streamer?
- For elective 3. The flyer is expected to perform this activity largely on their own, though can be assisted the flyer needs to be the mind doing the work. As there is no flight, the observations are limited to the quality of work and a 'fit to fly assessment.'

Authors note: this is not expected to be the popular elective, but allows for a wet weather option, or for an elective that can be performed offsite if necessary.

Examples:

Assemble a parachute from scratch, observed by the assessor. Fit the parachute to a kit. Note: a flight is not necessary for completion of this elective.

The use of the Estes kit 'chute, or similar, is acceptable as long as the flyer is observed performing the work. These are still available, most kits come with chute preassembled.

Fitting one or more fins, for example gluing on a balsawood fin or fins onto a model, showing understanding for the basic methods of construction, use of adhesives etc.

## Submitting record card

Carry out the following:

1. Activities are recorded on the MAPBAN record document. Make sure the form is as complete as you can make it
2. Copy the information to UKRA, details will be given on the UKRA website
3. Include contact details for the assessor as shown on the form
4. Optionally, include any supporting material, pictures (say of flight cards and rockets), notes etc you wish.