SILVER

NAVIGATION MODULE

POINTS

This module is the **NAVIGATION** requirement suitable ONLY for

- **SILVER**

TASK SUMMARY

The standard minimum distance for the **SILVER** task is **200 NM***, unless you have a slower aircraft, in which case there is an accommodation for this.

See **task elements** section for details

*Absolute minimum is 116NM.

OBJECTIVE

The aim of the BMAA Navigation tasks is for the pilot to demonstrate planning and execution of a flight to specified times and fuel consumption goals. For newer pilots it also provides the opportunity to progress to the next level after their NPPL.

It is anticipated that the vast majority of pilots will achieve the objective at the first attempt, with the opportunity for self-examination as to how the task was achieved but maybe not completed as they expected, and for those who fall at the hurdle to have valued experience to improve flight planning.

TASK ELEMENTS

The basic task distance is in line with similar aircraft in sister associations, but we have made some **allowances** for categories of aircraft we have which others do not, to cater for a large diversity of aircraft types and performances.

There is a **calculator** to make the task more accessible for aircraft with lower cruise speeds.

In order to avoid task flyers being pressured by things outside their control, we ask for the segment times to be recorded between the exit and entry point to the traffic patterns for the departure and arrival airfields. Should you find yourself in a queue for take-off, you are not penalised, as you only start the stopwatch when you set course for the first waypoint, and same philosophy applies to arriving in the circuit or joining overhead at a busy airport or having to extend a long way downwind to accommodate other traffic. The task form expects you to plan your flight time between these points, not from brakes off to brakes on, nor from take-off to landing.

Fuel is different - the task requirement is to estimate total fuel consumption for the leg, including any time

you may spend in queues, as there is no slack on this - regardless of any delays you must have enough fuel both for this Wings flight and for any other trips you plan.

The task has a requirement for **waypoints**. The reason for a waypoint is to focus on the use of the same for avoiding airspace or checking on your navigation at a useful point in the task. The use of visual reference points (VRPs) is a great technique, both for confirmation when using a moving map, or navigating using a paper chart. Providing it meets the task criteria, you should place the waypoint somewhere that makes the task easier for you, and forms one of the tools in your TEM (Threat and Error Management) for avoiding infringements or getting lost.

The suggestion is to plan and execute the tasks with methods you are familiar with. We advise you to avoid taking on more than one new thing at a time. If that familiar method is a paper map, ruler and stopwatch, so be it. If you use a moving map, then that's fine too. Flying a Wings Navigation Task isn't the time to change your methods of navigation.

OVERVIEW & PHILOSOPHY

The **standard minimum distance** for the **SILVER** task is **200 NM**, unless you have a slower aircraft, in which case there is an accommodation for this. A slower aircraft for the purpose of this task is an aircraft with a cruise speed of less than 60 knots. This is done to cater for a wide range of aircraft performance and to recognise that the Wings scheme should be open to everyone irrespective of which type of microlight they fly.

The pilot must choose the cruise speed to use during planning and all calculations of time and fuel will be based upon that speed.

NOTES:

1. If your aircraft cruises at 60 knots or faster, the minimum distance for the SILVER navigation task is 200 NM.
   If you fly an aircraft with a lower cruise speed, then you may use a lower minimum distance for the flight. This figure is the cruise air speed that you choose

multiplied by ten then the result divided by three to give a distance in nautical miles.

Example

Cruise speed (kts)	X 10	/ 3	Distance
50 kts	50	166.67	167 NM

If the result of this calculation is less than **116 NM**, you must use the figure of **116 NM**.

2. The flight should be completed in no more than two days.

3. The distance given or calculated is a **minimum**. If you want to fly further, you can. The same criteria apply to your flight plan, in that you must schedule the flight and predict the fuel consumption and be within the same percentage requirements.

4. For each leg of the flight enter one planned Waypoint along the route, no less than **20 NM** from each departure airfield measured in a straight line, and the planned time at that point.

5. Departure time is the time that the aircraft sets course for the next Waypoint or Airfield. It is not the brakes-off or take-off time.

6. Arrival time is the time that the aircraft arrives overhead the Waypoint or Airfield, or the time that the aircraft joins the airfield traffic pattern.

7. Hand a copy of the plan to your BMAA observer or email it in prior to departure. Complete the actual times and fuel use after the flight.

8. Flight times achieved must be within 20% of planned times. Fuel use must be within 20% of planned use.

COMPLETION

Changes have been made to the way the task can be verified.

There is a **Navigation PLOG Form** which must be completed for recognition of the task. **The plan must be submitted <u>BEFORE</u> departure**.

There are now two methods of completion

1. OBSERVER

The first way is to use an **observer**. A BMAA approved observer is a person known to and trusted by the BMAA (a fellow BMAA member, flight instructor or inspector would be ideal). The observer should be a pilot or person familiar with navigation tasks.

- The observer keeps the task form with the planning details on it whilst you fly the task.
- On your return, you complete the form with the figures obtained in flight.
- The observer signs it all off as a true representation and you send the form in.

2. GPS LOG

The second way is to:

- send in a copy or a scan of the planned flight **before you fly** to wings@bmaa.org.
- Complete the flight and the form with the actual figures, then mail it in **with a track log file** from your EFB or GPS unit.
  Accepted formats are:
  .trk (from PilotAware and some EFBs),
  .gpx (from SkyDemon if you mail your log for the flight to yourself) or
  .igc (most gliding apps and some older Garmin devices).

Please send your completed post-flight declarations to wings@bmaa.org or post paper applications to BMAA HQ.