

Devon and Somerset Gliding Club



Notes on NOTAMs and SPINE interpretation software

This document is intended to provide some background information on NOTAM information, as relevant to gliding in the UK, a brief overview of the Spine software available for interpreting NOTAM information and a tutorial on how to download NOTAM data before any cross-country flight. The text is cribbed entirely from Bristol & Gloucester GC website.

What are NOTAM's ?

NOTAMS or Notices to Airmen are published by government agencies to alert pilots to hazards on route to a specific location. Hazards may include: airshows, parachute jumps, rocket launches, flights by VIP's, military exercises temporary restricted areas and a host of other hazards more associated with powered traffic such as closed runways, inoperable navigation aids etc.

Why are NOTAM's relevant to me?

It is each pilots own responsibility to understand and obey the rules of the air at all times, for cross country flying this means that every pilot is responsible for checking for relevant NOTAMs prior to any flight. Even if someone else has already checked, it is still your own responsibility. In the past the CAA has successfully prosecuted pilots for infringing temporary airspace posted in NOTAMs and the courts have imposed fines of several thousand pounds.

Where can I find information about NOTAM's ?

Official NOTAM information is published in the UK by NATS (National Air Traffic Service) on the AIS (Aeronautical Information Service) website at:

<http://www.nats-uk.ead-it.com/public/index.php.html>

there is a BGA crib sheet for using this site available at

<http://www.gliding.co.uk/bgainfo/airspace/documents/notamcrib.doc>

Access to NOTAM information is free but does require registration, several different services are available from the NAS website once registered, these are:

- **Aerodrome Brief** Delivers a briefing containing Aerodrome NOTAM for the selected aerodromes between the time period set. At least ONE aerodrome MUST be selected and the default time is from now until + 12 hours but may be changed by the user.
- **Area Brief** Delivers a briefing containing FIR and Aerodrome NOTAM for the selected Flight Information Regions between the time period set. At least ONE FIR MUST be selected and the default time is from now until + 12 hours but may be changed by the user.
- **Route Brief** Delivers a briefing containing NOTAM for the selected FIR and Aerodrome between the time period set. The system estimates the FIR crossed and includes the FIR NOTAM in the output. The user can also add FIR and Aerodrome to be included. The default time is from now until + 12 hours but may be changed by the user.
- **Narrow Route Brief** Delivers a briefing containing FIR and Aerodrome NOTAM for the selected flight plan route and between the time period set. A point of departure and destination must be provided. The brief will contain NOTAM for FIR, point of Departure, Destination and aerodrome in alternate aerodrome list. The default time is from now until + 12 hours but may be changed by the user.
- **Point Brief** Delivers a briefing containing FIR NOTAM affecting a circle from an aerodrome, navaid or Lat/Long co-ordinate. The Aerodrome NOTAM will only be included if it is in additional aerodromes. The default time is from now until + 12 hours but may be changed by the user.
- **VFR/FIR Brief EGTT** Delivers a briefing containing all FIR and Aerodrome NOTAM for the selected FIR EGTT between the time period set from now until + 12 hours. The briefing is sorted in order of North to South.
- **VFR/FIR Brief EGPX** Delivers a briefing containing all FIR and Aerodrome NOTAM for the selected FIR EGPX between the time period set from now until + 12 hours. The briefing is sorted in order of North to South.

- **VFR Aerodrome Brief EGTT** Delivers a briefing containing Aerodrome NOTAM in the preset FIR EGTT between the time period set now until + 12 hours. The briefing is sorted in order of North to South.
- **VFR Aerodrome Brief EGPX** Delivers a briefing containing Aerodrome NOTAM in the preset FIR EGPX between the time period set now until + 12 hours. The briefing is sorted in order of North to South.

Briefing **Handbook (Saved Briefings)** Provides access to previous briefing parameters for repeat briefings with same parameters. Provides access to an update to a previous briefing for up to 3 days after the original time. Note Does NOT allow for historic briefings.

Cross-country gliding and NOTAM's

BGA Operational Regulation 6.26 states:

“To ensure that all pilots can comply with the law, clubs must receive or have access to navigational information concerning temporary hazards and permanent changes. This information is to be made available to all pilots. Under Article 52 of the Air Navigation Order 2005, the pilot of an aircraft must satisfy himself that the flight can be safely made taking into account the latest information available as to the route and the aerodromes to be used.”

In the past there has been a great deal of criticism regarding the publication of this data, chiefly associated with the difficulty in interpreting the information provided. Many of the published NOTAMs have no relevance to gliders and it can take a great deal of time to sort through a published list of hundreds of NOTAMs manually filtering out the irrelevant “ILS Unavailable at...”, “Runway light inoperative at...” from the critically important parachute drops zones and temporary restricted airspace.

To help with these problems there is now a freely available software package called spine which interprets the published NOTAM data and displays the information on a map of the UK.

Types of NOTAM

When checking for NOTAMS affecting a cross-country flight you will encounter many different types, some NOTAMS are simple warnings to look out for an obstruction such as a captive balloon whilst others may be restricted or prohibited airspace that must not be entered under any circumstances. It is necessary to read the description for an individual NOTAM to see what the particular restrictions are.

Restricted Area (Temporary) RA(T)

A Restricted Area (Temporary) RA(T) is the new term used to describe airspace restrictions of a temporary nature made under article 96 of the air navigation order (ANO), these used to be referred to as a Temporary Restricted Areas, which was often abbreviated to TRA. However the abbreviation TRA now refers to Temporary Reserved Areas, for example some of the glider wave flying boxes available above FL195.

A useful source of information regarding airspace and NOTAM's is the BGA website airspace section available at <http://www.gliding.co.uk/bgainfo/airspace/introduction.htm>

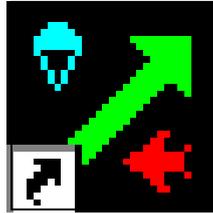
Spine

Spine (**S**oaring **P**ilots **I**ntelligent **N**OTAM **E**ditor) is installed on the club's computer for anyone's use, it can also be downloaded free of charge from <http://www.enborne.f2s.com/gliding/spine.htm> for your use at home.

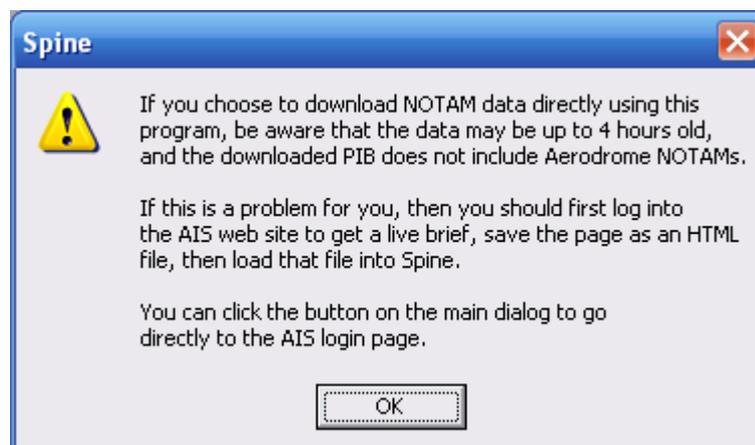
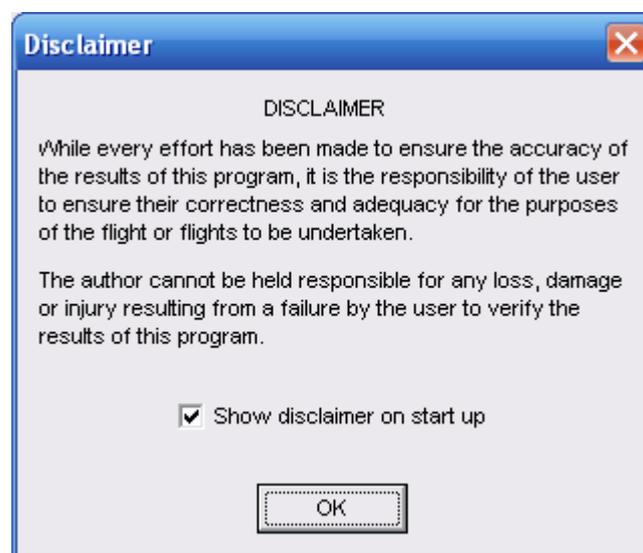
Spine downloads and interprets the published NOTAM data and filters out those with no relevance to gliding. It can then plot the location of each relevant hazard on a map of the UK which also displays airspace and BGA turning points. Please read the information on the spine website for a full description of the software.

Obtaining NOTAMs with Spine

1. Turn on SPINE software by double clicking desktop icon.

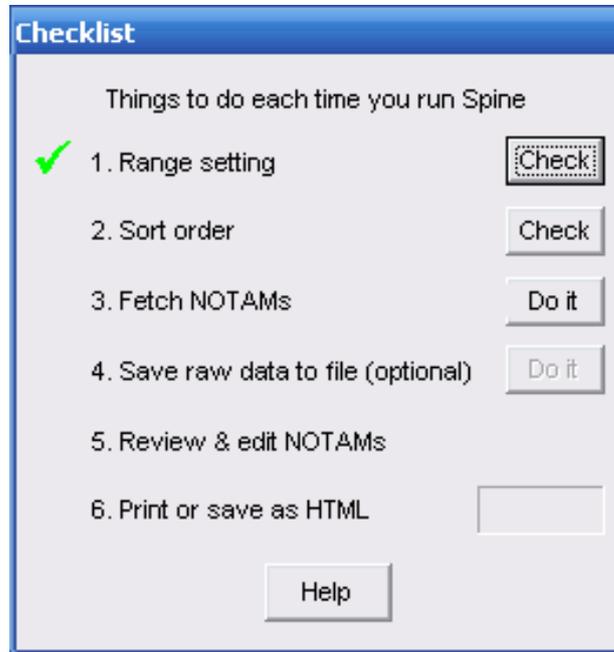


2. Read and Acknowledge the two disclaimers

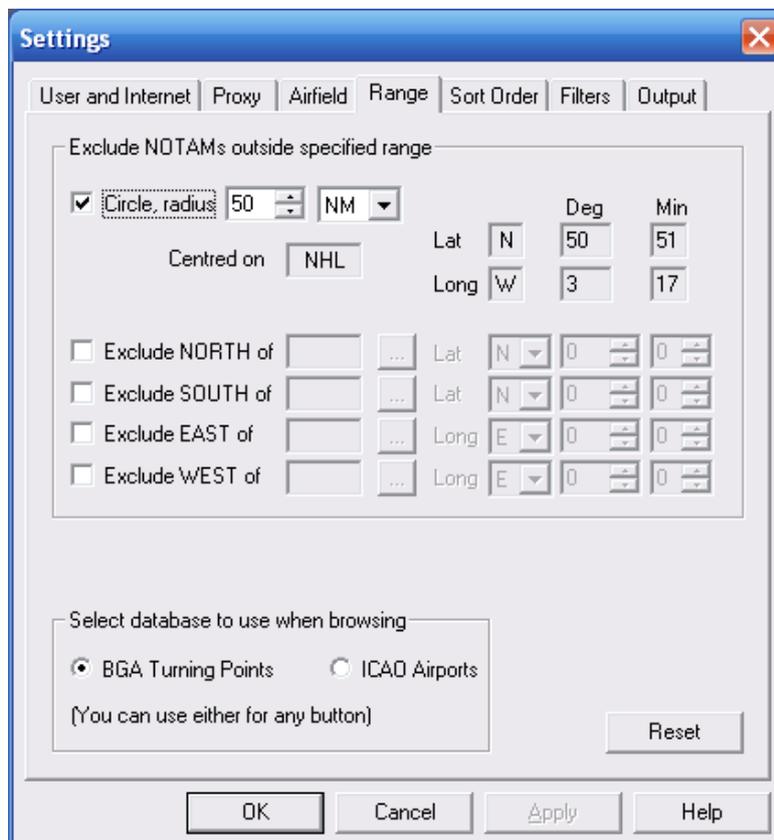


3. A Checklist now appears detailing the steps you need to take to check for NOTAMs. Run through the items on the 'Checklist' box, when each item is successfully completed a green tick appears alongside.

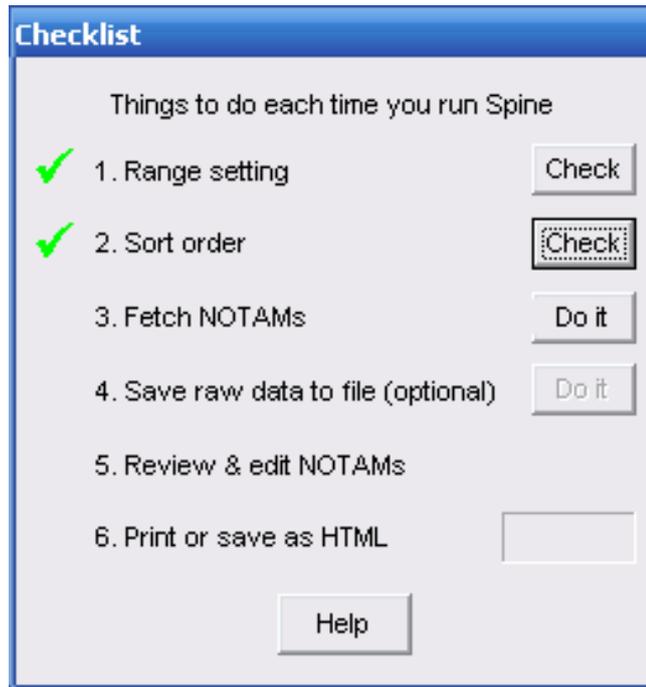
a) To set the area to cover the intended flight, click the "Check" box next to Range Setting. This excludes the NOTAMs outside the area.



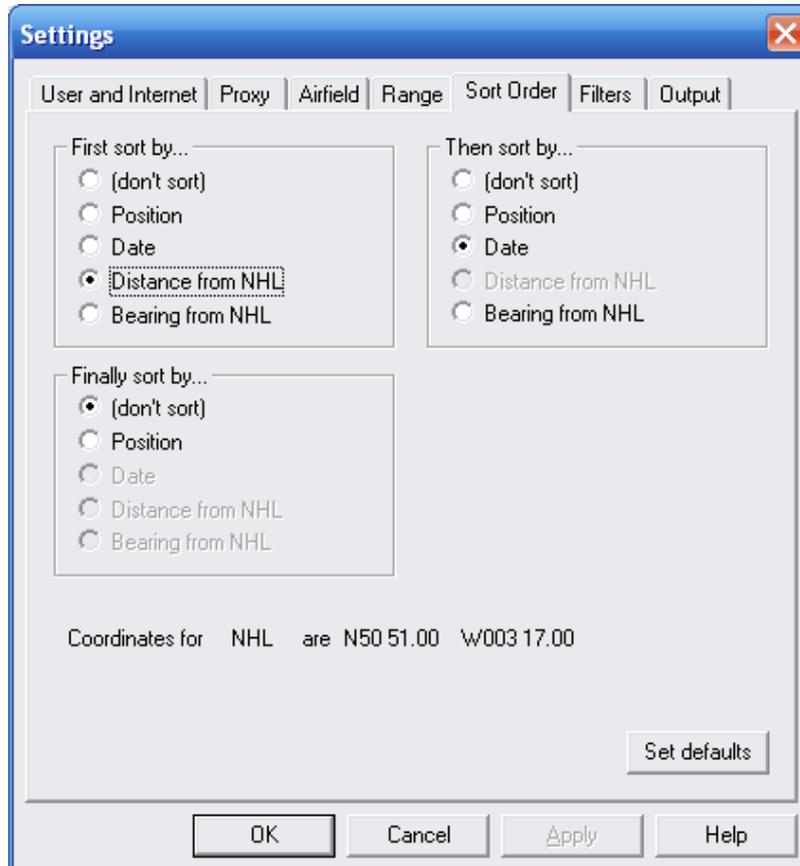
In the example below NOTAMs outside a 50 nautical mile radius centred on North Hill has been excluded.



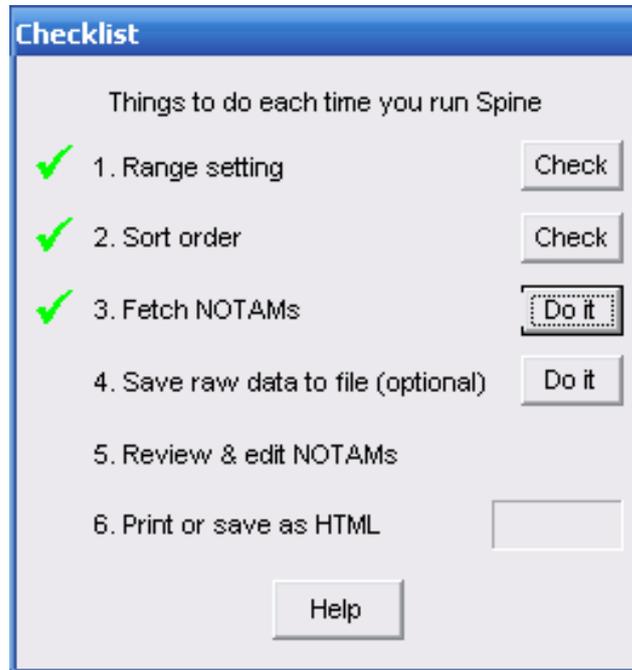
b) To arrange the NOTAM listing in a particular order, click the “Check” box next to Sort order. This is used to list NOTAMS in order of position or distance from North Hill etc.



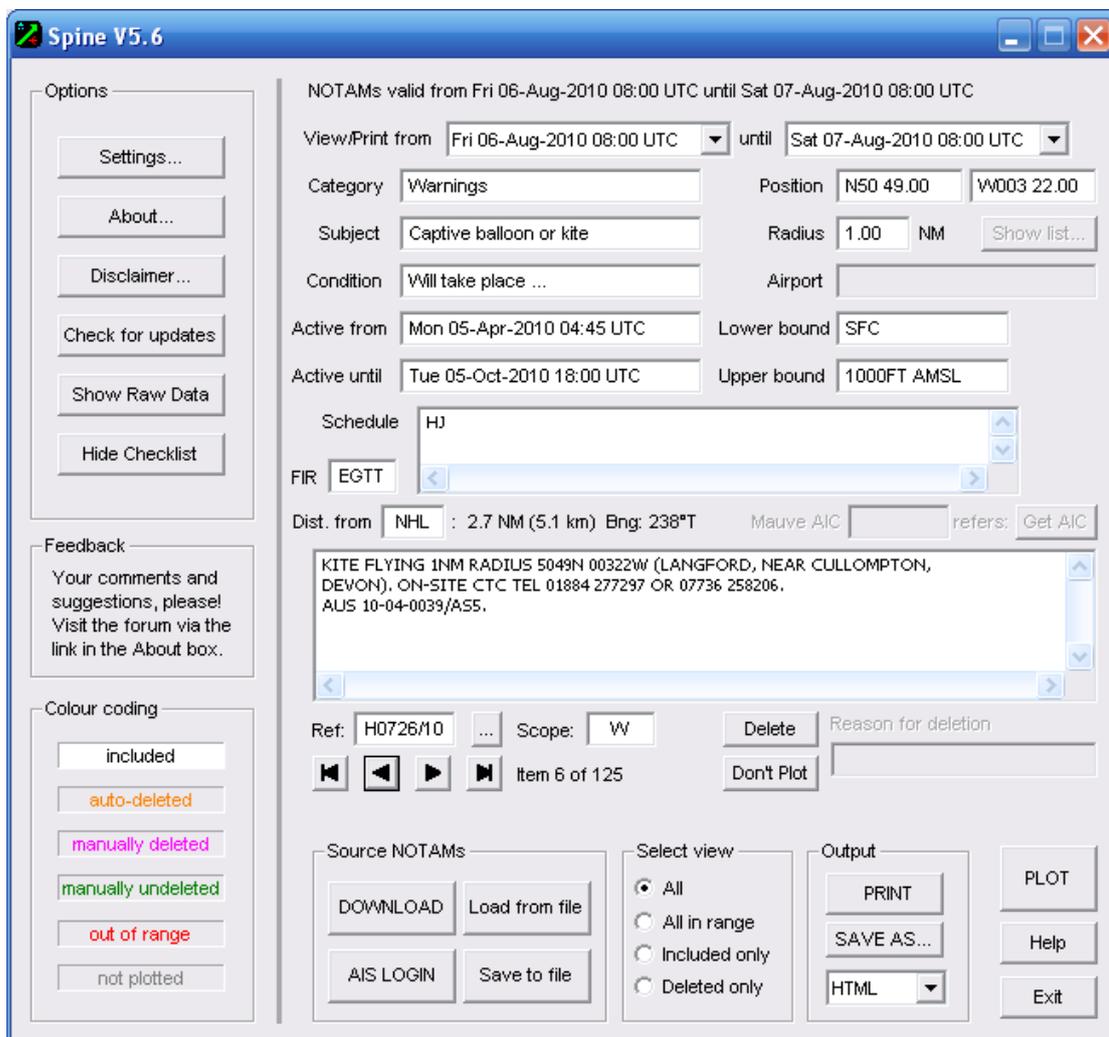
In the example below NOTAMs are sorted in order of Distance from North Hill and then by Date



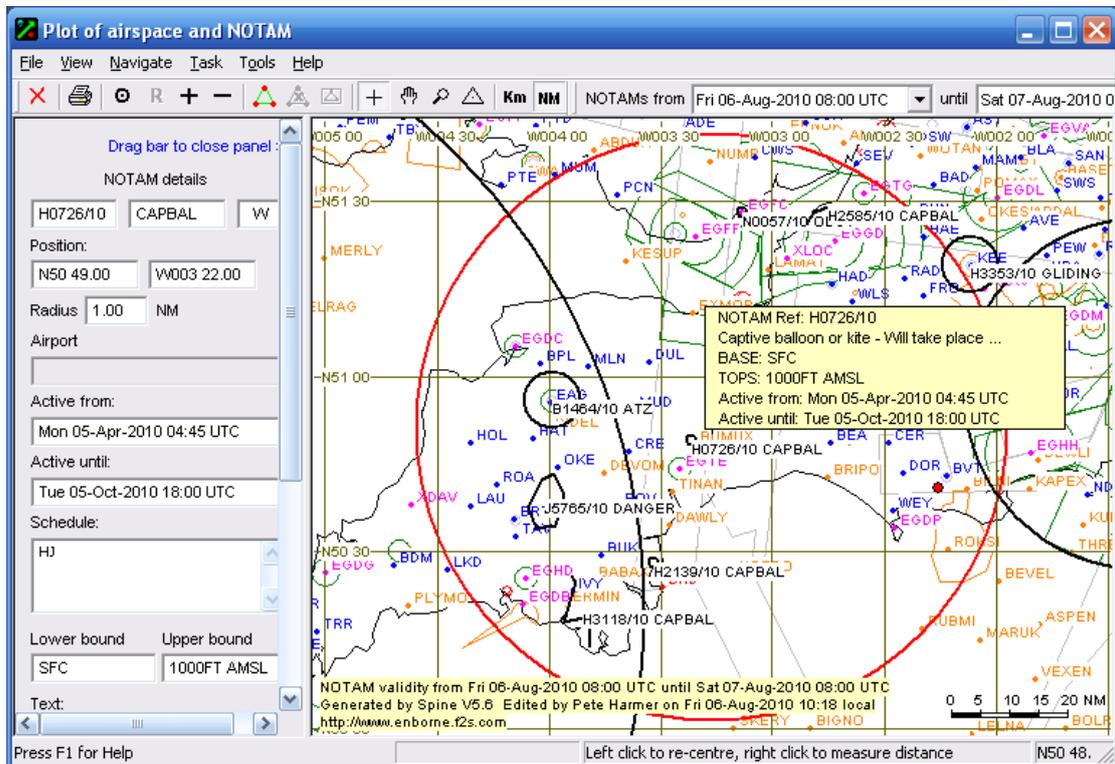
c) Click the 'Do it' button next to Fetch NOTAMs. SPINE will then download NOTAM information directly from the AIS website and sort them based on the options that have been set above.



4. SPINE then displays a box similar to the one displayed below.



As an example the small circle south west of North Hill labelled H0726/10 CAPBAL, by moving the cursor over this circle a summary is displayed in a nearby yellow box, detailed information is shown in the left hand portion of the window, as shown in the following example.



From the information in the side pane we can see that NOTAM H0726/10 is of the type CAPBAL (Captive Balloon). It is centered at position N50° 49.00 W003° 22.00, it affects an area with a radius of 1 nautical miles from the surface (SFC) up to an altitude of 1000 ft above mean sea level (AMSL). It is active from 04:45 UTC on Mon 5th April 2010 until 18:00 UTC on Tuesday 5th October 2010. Scrolling down within the side pane displays text from the NOTAM, as shown below

