

# **SONNING COMMON SNOW PLAN OPERATIONS**

*(Preparation, field operations & forecasting)*

## **1) A ‘Snow Plan’ starts before snow arrives**

Effective use of any ‘Snow Plan’ rests on the reliability and accuracy of a local snow event forecast, with the emphasis on ‘local’. The topographical variances of the Chilterns, when compared with the flat alluvial flood plains of the Thames to the south, can create very different local weather events within the same air mass.

Whilst the creation of any precipitation depends on the moisture content of an air mass and its ability to remain airborne, what is of crucial interest to any ‘Snow Plan’ are the temperatures within that air and on the surfaces below. A general forecast can indicate the potential for winter precipitation occurring but cannot be specific as to how much, when or where. More specifically, it cannot say with any great accuracy what it will do when it lands for the first time. This is where ‘local’ comes in.

Many will say that a ‘Snow Plan’ should clear snow and then grit/salt, and this is true once snow has already fallen and remains, but pre-treating surfaces before snow (or freezing rain) arrives can make a vital difference. Fresh fallen snow on its own has traction and you can walk safely on it, but snow lying on ice or a surface covered in frozen rain (black ice) has no traction and is dangerous.

How many times, after fresh snow has fallen, have footprints (or tyre marks) remained stubbornly in place after scraping or sweeping? This is snow compressed into ice and imprinted on the surface below it, and will remain part of the texture of that surface until it thaws. Further snowfall will remain on this ice and freeze to it, regardless of snow clearing efforts, and ensure there is no traction underfoot. Pre-salting prepares the surfaces for the duration of the snow event and ensures ‘sticking’ is minimised, so the timing of pre-salting is critical for any ‘Snow Plan’.

## 2) What is the Parish ‘Snow Plan’?

Essentially it is the combination of manpower, resources, meteorological forecasts, and the knowledge of local air and ground surface temperatures.

### **Manpower:**

A) The Parish will hold a master list of available manpower, their notice requirements and any additional facilities they may have to assist.

B) ‘Green Status’: No winter precipitation action is required. The Parish Clerk or nominated Councillor will monitor weather forecasts as appropriate.

C) ‘Yellow Alert’: When an area forecasts indicates the possibility of winter precipitation (snow or freezing rain) within the next 48hours all manpower will be advised and requested to confirm their availability and contact numbers. At this stage a ‘Duty Snow Leader’ (DSL\*) rota will be confirmed.

D) ‘Amber Alert’: When local area forecasts confirm the possibility of winter precipitation and surface temperatures are at or below freezing (regardless of air temperature) the DSL will place confirmed manpower on 12hours notice, with a provisional start time if pre-salting (\*) is proposed.

E) ‘Red Alert’: Once precipitation is falling/has fallen all confirmed manpower will be advised by the DSL of a start time for snow clearance and/or gritting with a minimum of 2hours notice. (RVP: Village Hall)

F) ‘Maintenance Alert’: The DSL may organise additional ad-hoc clearance and/or gritting of reported problems within the core plan area.

G) ‘Outreach Alert’: once conditions in the core area have stabilised the DSL may organise clearing and/or gritting of secondary pavements.

H) ‘Traffic Alert’: If conditions become such that road access to the core areas from the Peppard Road becomes difficult then the DSL may activate the ‘Severe Tarmac’ plan (\*).

I) ‘Stand Down’: The DSL will declare the return to ‘Green Status’ once no further action is required. The Parish office will inform all manpower of the ‘Green Status’.

## **\*Duty Snow Leader (DSL):**

A) A DSL may be any suitable member of the community as selected and briefed by the Clerk or his nominee.

B) A DSL will lead the 'Action Team' for an agreed period of time before handing over to a successor on the rota. Under a 'Yellow or Amber Alert' this may be for 8 to 12 hours whereas under 'Red Alert' (Active) this may be only 4 hours, depending on events. Successive DSLs should agree periods of duty in advance and inform the Clerk or his nominee of their mobile contact number.

C) There should be no requirement for any DSL to have access to the Parish office. Once 'Yellow Alert' has been declared the Clerk shall arrange for all relevant documents and manpower lists to be placed in the store room, and radio equipment placed on charge.

D) The DSL will have access to store room keys and be responsible for allocation of all equipment and grit supplies, it's accounting for, and the recharging of radios. If grit supplies fall below 20 bags the Clerk to be notified asap.

E) The DSL shall have a mobile phone and ensure that all manpower have a record of it. Any emergency should relayed to the DSL by phone or radio.

F) For normal manpower duties the DSL, each grit spreading team and the grit transport driver should have a radio. Radios (\*) should be tested before leaving store room using call signs (handles) as listed on the manpower document.

G) In the event of the 'Severe Tarmac' plan all four radios should be allocated to the one team, as should both marshalling flags.

E) The DSL shall mutually agree allocation of work zones and the signing out of all manpower at the conclusion of work (so that their safety can be confirmed).

F) At the conclusion of a 'Red Alert' duty period the DSL should complete the 'Job Sheet' and inform any subsequent DSL of any outstanding matters, confirming transfer of duty.

(\*Note: the radios require two seconds to build up to full transmission power: press 'talk' button, wait two seconds, talk normally, release button to listen. Confirmation of button release is an automatic 'roger' bleep.)

## **\*Pre-Salting:**

A) Pre-salting is the application of salt (in our case with grit) on surfaces which are likely to see heavy use and possible compression of snow into an ice layer which would otherwise adhere to the surface texture and be more difficult to remove.

B) Pre-salting can be viewed as a calculated gamble which is administered within a specific time window. Hence the required accuracy of a local weather forecast combined with an observer at the scene to confirm the actuality.

C) If surface ground temperatures are above freezing, or if rainfall is expected in advance of a snowfall, regardless of surface temperatures, pre-salting is either not required or should be delayed. (Essentially: rain washes salt away.)

D) If surface temperatures are below freezing and no preceding rain is expected, pre-salting may be done at any time at relative convenience.

E) Crucially: if surface temperatures are below freezing and rainfall is expected before the arrival of freezing rain or snow, then the pre-salting should occur once the rainfall has either stopped or is converting to freezing rain/snow. This can be a very narrow window of opportunity, perhaps as little as 30 minutes to an hour.

F) The 'Amber Alert' warning may include a pre-salting warning, hence the inclusion of a 'provisional start time' (which manpower members may of course understandably decline to accept when contacted). The DSL will monitor this and call a 'Red Alert' for pre-salting at as little as one hours notice, at any time of day, with whatever manpower is available.

G) In areas where pre-salting has been successfully applied the onset of a requirement to clear or further grit areas can be monitored and delayed by a considerable period of time, especially if the area is 'in use' and is being warmed by usage. This is especially so in our case where we are using a mixture of salt (melts ice down to approximately minus 8 degrees centigrade) and grit which provides traction underfoot.

**\*Severe Tarmac plan:**

A) The Parish snow plan is primarily to enhance the safety of, and access to, the core areas in the central village for pedestrian usage.

B) The ‘Severe Tarmac’ is an additional, optional, plan only activated should road traffic be inhibited from accessing the central village core from the Peppard Road due to severe conditions.

C) Being a primary route the main B481 Peppard Road is the sole responsibility of OCC. The Bus Route through Kennylands Rd / Wood Lane is also an OCC responsibility, but history has shown this route to be a secondary priority.

D) The primary target of the ‘Severe Tarmac’ plan is to ensure relatively steep slope of the Wood Lane section from the brow of the hill (Woodlands Rd) to the Peppard Road (Brinds Corner) is kept passable for traffic, including our bus route. If OCC do not salt this hill, or it becomes impassable regardless, we must do it or the central core will become isolated.

E) The secondary targets of the plan are the Grove Road, Westleigh Drive and Widmore Lane slopes.

F) Tertiary targets are the parking areas of the Village Hall and Health Centre.

G) If the plan is launched then OCC (Paul Wilson) and (TVP) must be informed and in the latter case requested to assist in temporary traffic control/road closure if clearance work (plough) is undertaken. Towed gritting will not require outside assistance but OCC must be informed.

H) This plan has specific safety procedures and will only be undertaken in daylight with a full manpower team.

G) The DSL should be aware that gritting under this plan will substantially reduce available salt/grit stocks.

## **\*Volunteer Manpower Requirements**

A) The 'Snow Plan Action Team' will be working outdoors in wintry conditions so should:

- be physically capable of pushing/pulling a mini gritter (about the size and weight of a large child buggy) and lifting a 20kg bag of grit
- (or) be able to use a snow shovel/coarse broom for short periods (having their own tools would help but we have some in store)
- have suitable warm clothing, gloves and footwear (for the mini gritters manpower we have snow 'grippers' to pull over footwear)
- have a mobile phone and ideally a torch

B) As per the 'Alert' system a volunteer should be able to commit to:

- accepting an 'on alert call' 48 hours in advance of a snow forecast
- and verbally re-confirm availability to attend when called by the DSL 12 hours in advance (\*) when snow appears imminent
- an actual call out will be at 2 hours notice once the forecast has been proved right!

\* (The DSL will always contact volunteers on the 'short list' 12 hours before with the latest forecast and current work plan)

C) Working periods are envisaged to take no more than 2 hours per team (\*) if clearing snow off pavements/paths is required, much less if only gritting:

- If snow is 'heavy/deep' a mini plough will be used (where possible, it needs a 4 foot gap) and manual clearing will be 'tidying up' at the edges
- Ideally a 'cleared' pathway would be about 3 feet wide and ready for salting/gritting by gritter or in confined areas by gloved hand

\*(Obviously scenarios may vary and the commitment period is up to the volunteer. If work still needs to be done though we hope to carry on)

D) For safety reasons all manpower should 'check out' with the DSL before going off duty. Rendezvous point will usually be the village hall.

## **Meteorological Resources & Countdown:**

Early warning forecasts:

- A) UK Met Office - broad spectrum 5day area forecasts
- B) XC Weather - local cloud/precipitation/temperature 10day forecasts
- C) Ski Snow - area and local specific 7day forecasts

‘Yellow Alert’ basis (48hr):

- A) UK Weather + 1hr delay radar precipitation tracking
- B) Weather Online - road surface temperatures & precipitation
- C) UK Met Office Airfields - 6hourly forecasts + 30minute reports
- D) Ski Snow - area and local specific 24hr forecasts

‘Amber Alert’ basis (12hr):

- A) OCC Highways - broad spectrum 24hr gritting forecast / actuals
- B) Sonning Common - Weather station + forecaster.
- C) UK Weather + 1hr delay radar precipitation tracking
- D) RAF Brize Norton - 24hourly forecasts + 30minute reports

‘Red Alert’ basis (2hr):

- A) Mk. 1 eyeball + telephone.

*End of Document*