



Putting the air ambulance at the heart of Chittlehamholt...night and day.

Toby Russell, Community Landing Sites Development Officer

Background

As you may be aware Devon Air Ambulance (DAA) has been working hard towards extending flying operations into the hours of darkness.

As of late November 2016, we have increased operations to midnight every day which means around an extra 8 hours of service each day during the darker winter months. Our vision is to eventually provide a 24hr service and this is a huge step in realising that dream. This will bring a much needed operationally effective service - day and night - to your community.

DAA are working with communities across Devon to create a network of 'community landing sites' - these are pre-surveyed floodlit landing sites which are part-funded and managed by local communities. We currently have 63 community sites ready for night landing with a further approx. 140 sites at various stages of development. We expect to have upwards of 250 sites throughout Devon within the next 3-4 years.

What makes a good night landing site?

A night landing site could take many different shapes or forms - it could be a green, sports pitch or playing field, a school playground or local field.

A landing site needs to be a flat area of at least 50m x 50m, to provide maximum operational benefit and safety, have pedestrian and vehicle access nearby and could be on grass, tarmac or concrete. A nearby power source for lighting is useful although not essential. Whilst tall trees or power lines within the site might be a hazard, if they are on the periphery they may not cause a problem.

Floodlighting is an essential component of a community landing site for both safety and practical reasons – it will illuminate the site during landing and take-off and will help when loading a patient in the aircraft or during transfer between a land / air ambulance.

Where there are no existing lights in place or infrastructure to support new lighting, we are asking communities to install a 10m high steel column with a set of two 150 watt LED lights. This lighting system could be powered by mains electricity supply (240v) or a solar / wind power option which includes a set of batteries.

All lighting systems need to incorporate a GSM control switch, operated using a mobile phone SIM card, which will enable the lights to be turned on/off remotely meaning no-one needs to be on hand when the Air Ambulance arrives and takes-off.

Proposal to establish a community landing site in Chittlehamholt

Devon Air Ambulance has been working with Chittlehamholt, Satterleigh and Warkleigh Parish Council to identify a suitable area for a night landing site in the Parish and we have concluded that the playing field (opposite the village hall) in Chittlehamholt would make a good location.

The site offers good access to the community, an important feature as we want Air Ambulance paramedics to be able to easily leave the site on foot to go to a patient (should they arrive in the community before a land ambulance). There is also vehicle access from the main road meaning a patient can quite quickly be transferred from a land ambulance to the aircraft.

DAA Operations staff have visited the site and completed a survey of the night landing site. During that survey, we collected information on the site and any potential hazards, which will be passed onto the pilots and air crew. Having this info ensures our pilots can quickly assess a landing site well before they arrive there, speeding up the time it takes to get paramedics onto the ground (potentially saving around 15-20mins) and to a patient.

The main requirement for DAA to be able to land at night at the playing field in Chittlehamholt will be the installation of a new 10m steel column and two LED lights. That column would ideally be located by the corner of the fencing which surrounds the play equipment (see map below), illuminating a central area of the landing site. Power for the lighting (240v) would be taken from the shed (in the corner of the field), underground to the lighting column.

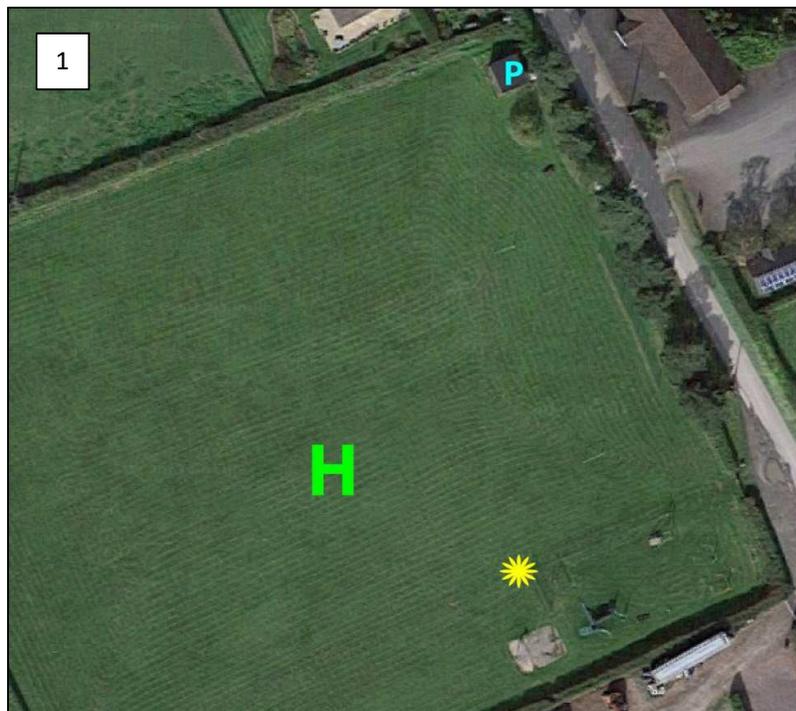


Photo 1: shows the proposed night landing site at the playing field in Chittlehamholt; yellow dot indicates location for the 10m lighting column, P indicates power source (route for the power cable is underground from the shed).

Lighting column & LED lights

As mentioned, a new 10m steel lighting column will need to be installed at the site. That column would have two 150 watt LED lights positioned at the top of the column, directed at a 60° angle to illuminate the landing area. There are no markings or other infrastructure needed to identify the landing area.

The need for a 10m high column is that, during trials, we assessed lighting columns at 6, 8 and 10m high. Only at 10m high were we able to achieve a large enough and yet 'tight' pool of light which would not cause glare for the helicopter pilots and crew as they land / take-off. Please see page overleaf with drawings of the 10m lighting column.

Photo 2: shows a 10m lighting column with LED's in place at a community landing site in Devon.



Managing a landing site:

Each community will need to put in place a system to monitor their landing site and report to DAA on any site changes. This is not arduous but means that the site is looked after properly, for example, by keeping rubbish free from the landing area.

We expect the costs of running each landing site to be low – the LED lights would cost around £0.15p per 4 hours of use and the remote switching unit will cost around £6-7.00 a year to be kept operational. The main annual cost involved is likely to be insurance, however the community might expect some limited maintenance costs of the equipment in the future.

Next steps:

- Promote the project within the village and wider community
- Establish final costs of the project. Costs for the lighting are known, costs for taking power from the Village Hall to the shed are being established.
- DAA will be very pleased to offer the community a grant to cover the installation costs (i.e. contractor costs) of the work involved, once those costs have been confirmed. That grant will come from the Libor Bank Fines fund.
- Once permissions are in place and funding confirmed, the lighting can be installed and the night landing site become operational for Devon Air Ambulance.

Should anyone wish to contribute to the project or find out more please speak to Chittlehamholt, Satterleigh and Warkleigh Parish Council. If you would like more information on the development of a night landing site in Chittlehamholt, please contact Toby Russell, Devon Air Ambulance *Community Landing Site Development Officer*, on: t.russell@daat.org

