Department for Transport

Search and Rescue Helicopter Statistics: Oct to Dec 2015

About this release

This is the **second** release in a new experimental statistics series covering civilian search and rescue helicopter (SARH) operations in the UK. Totals in this series will change considerably during the transition period, as statistics for the new bases are added. This release includes data for those bases open at the end of December 2015.
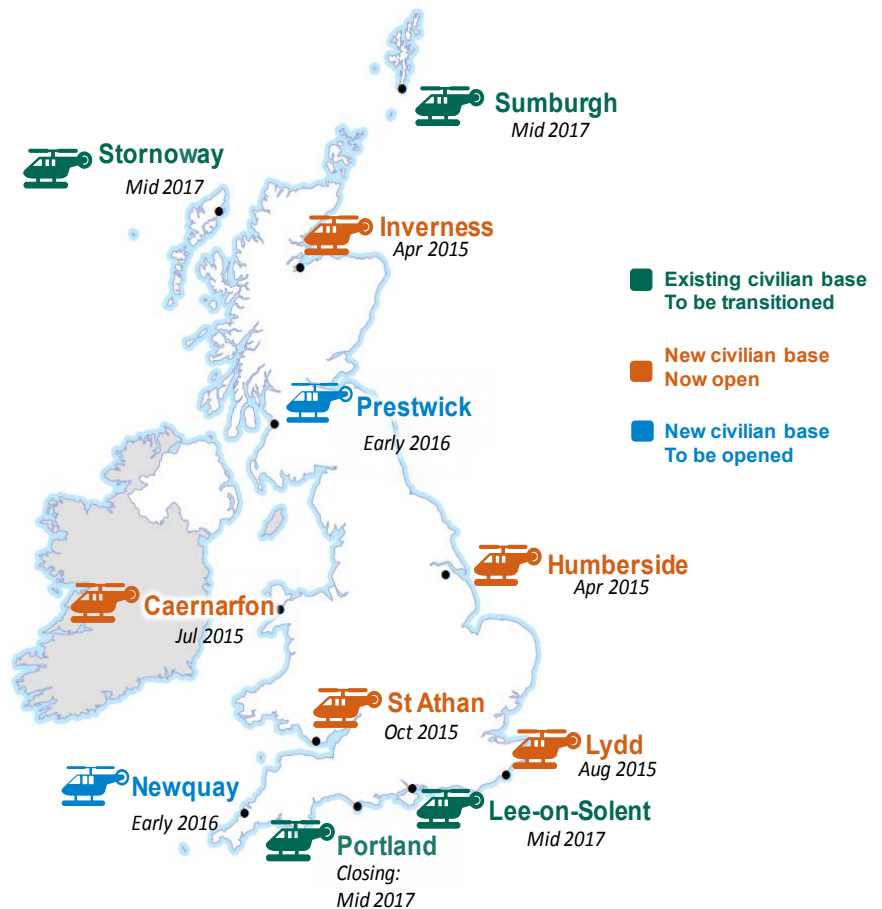
In this publication

Historically, search and rescue helicopter (SARH) operations in the United Kingdom were managed by the Ministry of Defence (MOD) and the Maritime and Coastguard Agency (MCA).

In April 2015, the operational phase of a new contract to operate civilian SARH services in the UK, managed by the MCA, commenced. These new arrangements are taking over from the previous mixture of military and coastguard SARH services.

The Department for Transport has now taken over the production of statistics on SARH activity, covering the civilian bases.

Map 1: Civilian SAR Helicopter Bases, October - December 2015

Sumburgh
Mid 2017

Stornoway
Mid 2017

Inverness
Apr 2015

Prestwick
Early 2016

Humberside
Apr 2015

Caernarfon
Jul 2015

St Athan
Oct 2015

Lydd
Aug 2015

Newquay
Early 2016

Portland
*Closing:
Mid 2017*

Lee-on-Solent
Mid 2017

**Existing civilian base
To be transitioned**

**New civilian base
Now open**

**New civilian base
To be opened**

Figures for the new bases in Newquay and Prestwick will be included in the next release.

Overall trends

From October to December 2015, there were 373 civilian SARH taskings. This was a 22 per cent decrease in the number of taskings in the previous quarter, despite a new helicopter base opening in St Athan on 4 October.

The Caernarfon base was tasked the highest number of times in this period, with 62 taskings, whereas Stornoway experienced the fewest, with 16 taskings. The St Athan base was tasked 49 times in its first quarter of operation.

Tasking Categories

Taskings involving rescue/ recovery accounted for just under half of all taskings during October to December. This was a slightly lower proportion than the previous two quarters when rescues/ recoveries accounted for over half of all taskings.

Rescues/ recoveries made up between 36 and 56 per cent of taskings in nearly all bases, but the proportion was lower in Lee-on-Solent, with only 14 per cent (as most of their taskings were pre-arranged transfers) and higher in Sumburgh, with rescues/ recoveries accounting for 88 per cent of all taskings.

Chart 1: Number of taskings by tasking category, October to December 2015 (SARH0102)
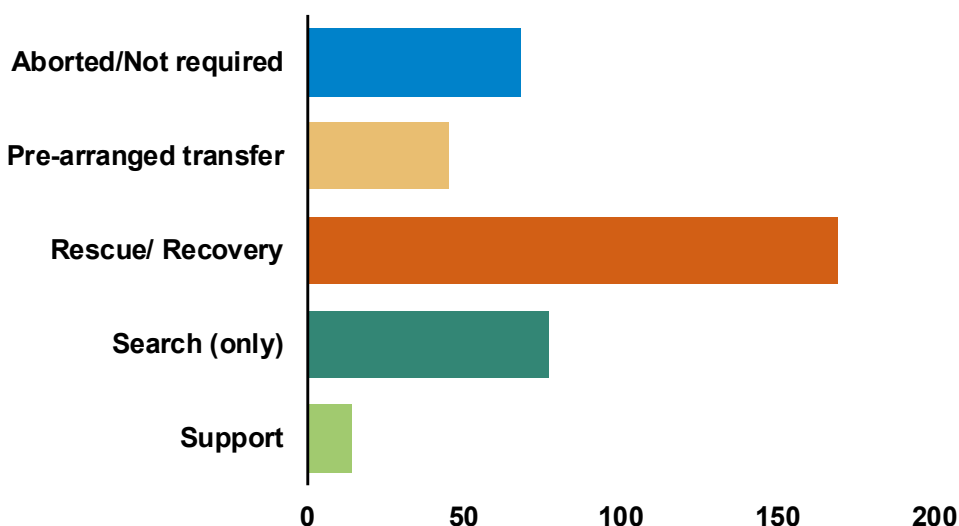
The second most common overall tasking type was Search (only) with 77 taskings over the period.

Of all pre-arranged transfers during the quarter, 60 per cent were carried out by the Lee-on-Solent base.

Definition

Tasking: The response of a SAR helicopter to an emergency as notified by the Aeronautical Rescue Coordination Centre (ARCC).

Aborted/ Not required: Includes taskings in which a SAR helicopter has been recalled, taskings terminated (e.g. due to bad weather), hoaxes and false alarms.

Pre-arranged transfer: Transfer of patients or organs between medical establishments.

Rescue/ Recovery: The transfer of person(s) resulting in them being delivered to a safe environment (including medical facilities). Includes any rescue that involves an element of search, and the recovery of persons apparently dead.

Search (only): Search for craft, person(s) etc which does not result in moving a person.

Support: Includes on-scene assistance, pre-positioning of SAR units for a potential incident and movement of equipment/ personnel.

Location

Between October and December 2015, just over half of taskings were land-based (54 per cent). Maritime taskings only accounted for around one in five taskings (19 per cent).
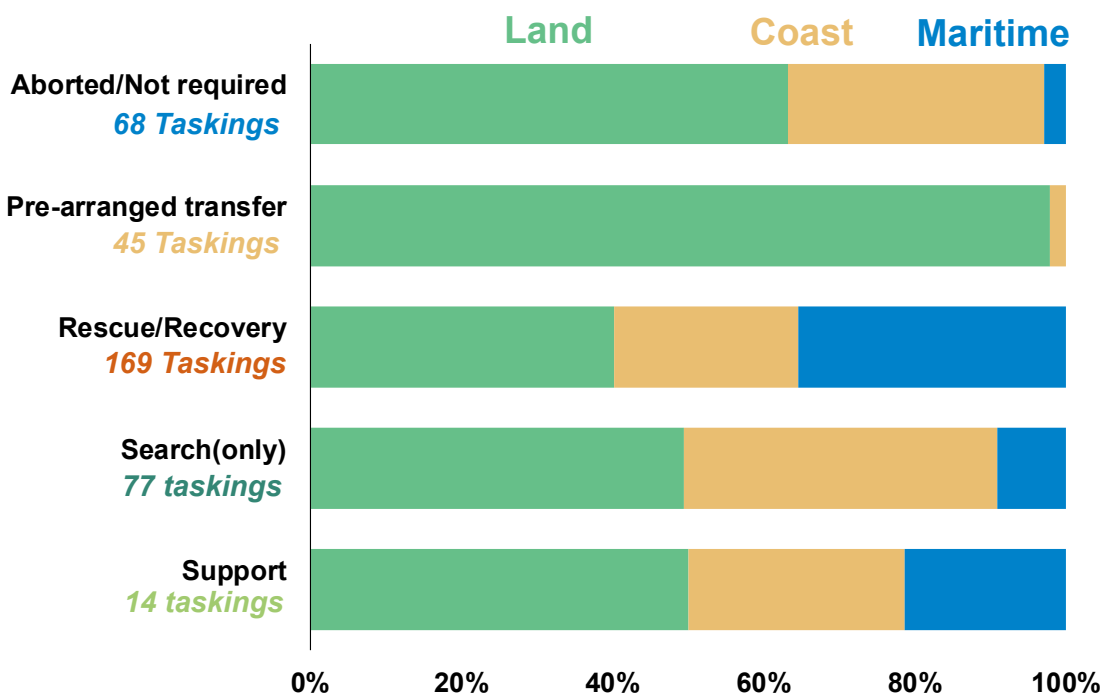
Chart 2: Proportion of taskings, by location type: October to December 2015 (SARH0103)

Maritime
72 Taskings

Land
200 Taskings

Total Taskings:
373
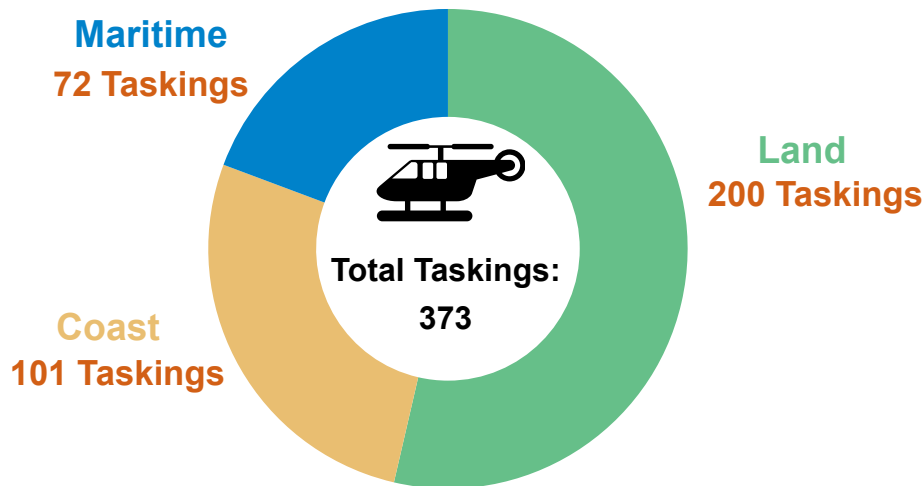
Coast
101 Taskings

When looking at tasking categories by location type, 98 per cent of pre-arranged transfers happened on land.

Nearly 91 per cent of searches took place on land or in coastal locations, showing that very few took place more than 3 nautical miles out to sea.

Chart 3: Proportion of taskings by category and location, October to December 2015 (SARH0105)

|	Land	Coast	Maritime
Aborted/Not required *68 Taskings*			
Pre-arranged transfer *45 Taskings*			
Rescue/Recovery *169 Taskings*			
Search(only) *77 taskings*			
Support *14 taskings*			

0%   20%   40%   60%   80%   100%

A third of all land-based taskings were rescues/ recoveries, while most of the rest were fairly evenly split between pre-arranged transfers, searches and taskings that were aborted/ not required.

Of all maritime taskings, 83 per cent resulted in rescue/ recovery, with most of the rest being searches. A third of maritime taskings were carried out by the Sumburgh base.

Time Spent on Taskings

Between October and December 2015, civilian SARH units spent 824 hours on taskings. Inverness recorded the highest amount of tasking time, spending 157 hours on taskings (across 61 taskings).

During the three months, November had the lowest amount of time spent on taskings (230 hours) compared to the busiest month of December, when 298 hours were spent on taskings.

Chart 4: Taskings vs Time Spent on Taskings, October to December 2015 (SARH0106)
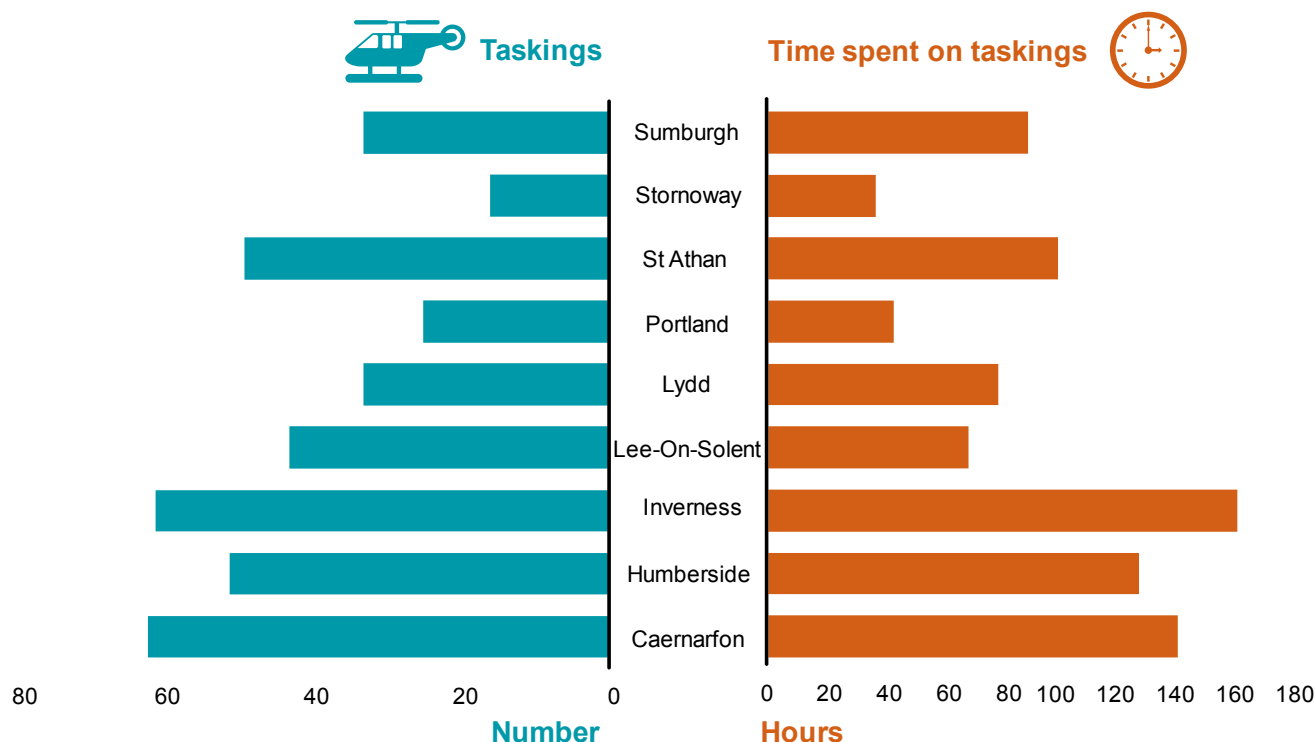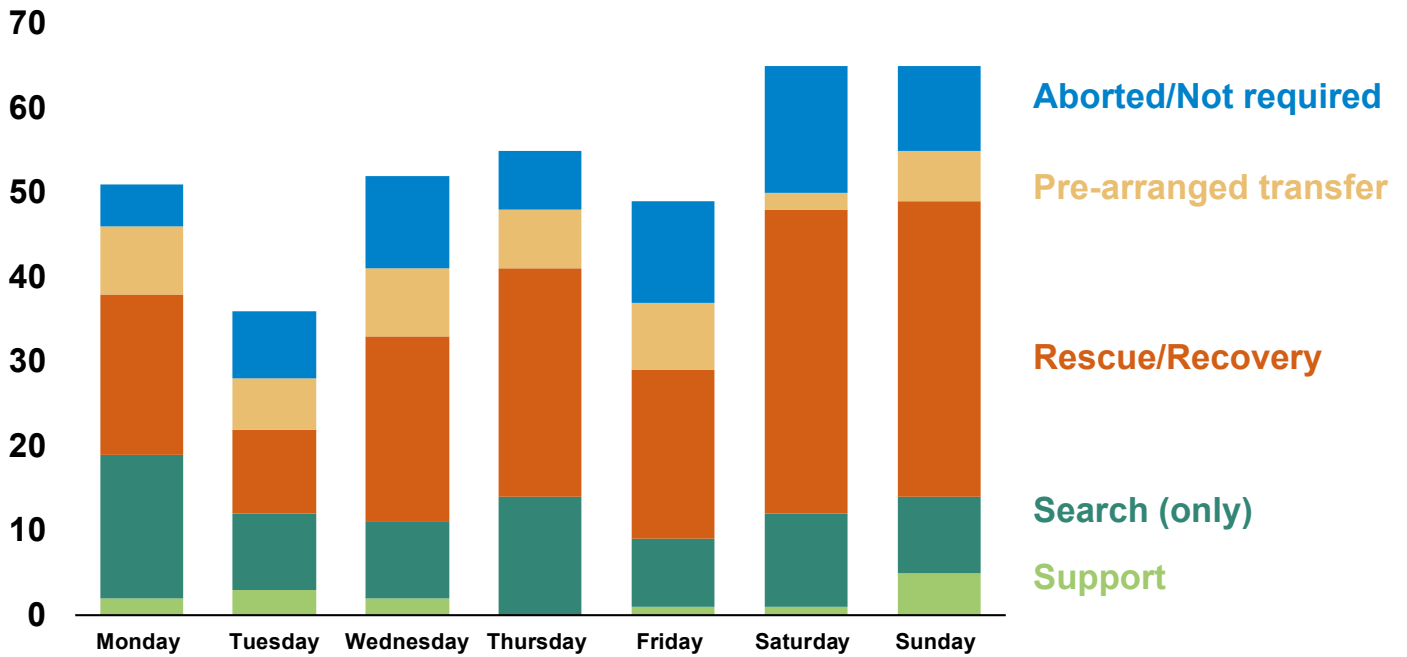

Tasking category by day of week

Between October and December 2015, taskings occurred more frequently on the weekend - there were 65 taskings on Saturdays and 65 on Sundays during the period. Fewer taskings took place on Tuesdays, with 36 taskings over the quarter.

Types of taskings differed depending on the day of the week. Rescue/ recoveries accounted for over half of taskings on weekends, compared to only around a third of taskings on Mondays and Tuesdays.

Pre-arranged transfers were more frequent on weekdays compared to weekends, accounting for around 15 per cent of all taskings on weekdays but only 6 per cent on weekends.

Chart 5: Number of taskings by day of the week when the base was tasked, October to December 2015 (SARH0107)

Tasking category by time of day

Nearly three quarters of taskings started between 9am and 8:59pm, with a peak of 85 taskings between 12pm and 2:59pm. The quietest three hour period was between 3am and 5:59am, with 15 taskings starting during this time.
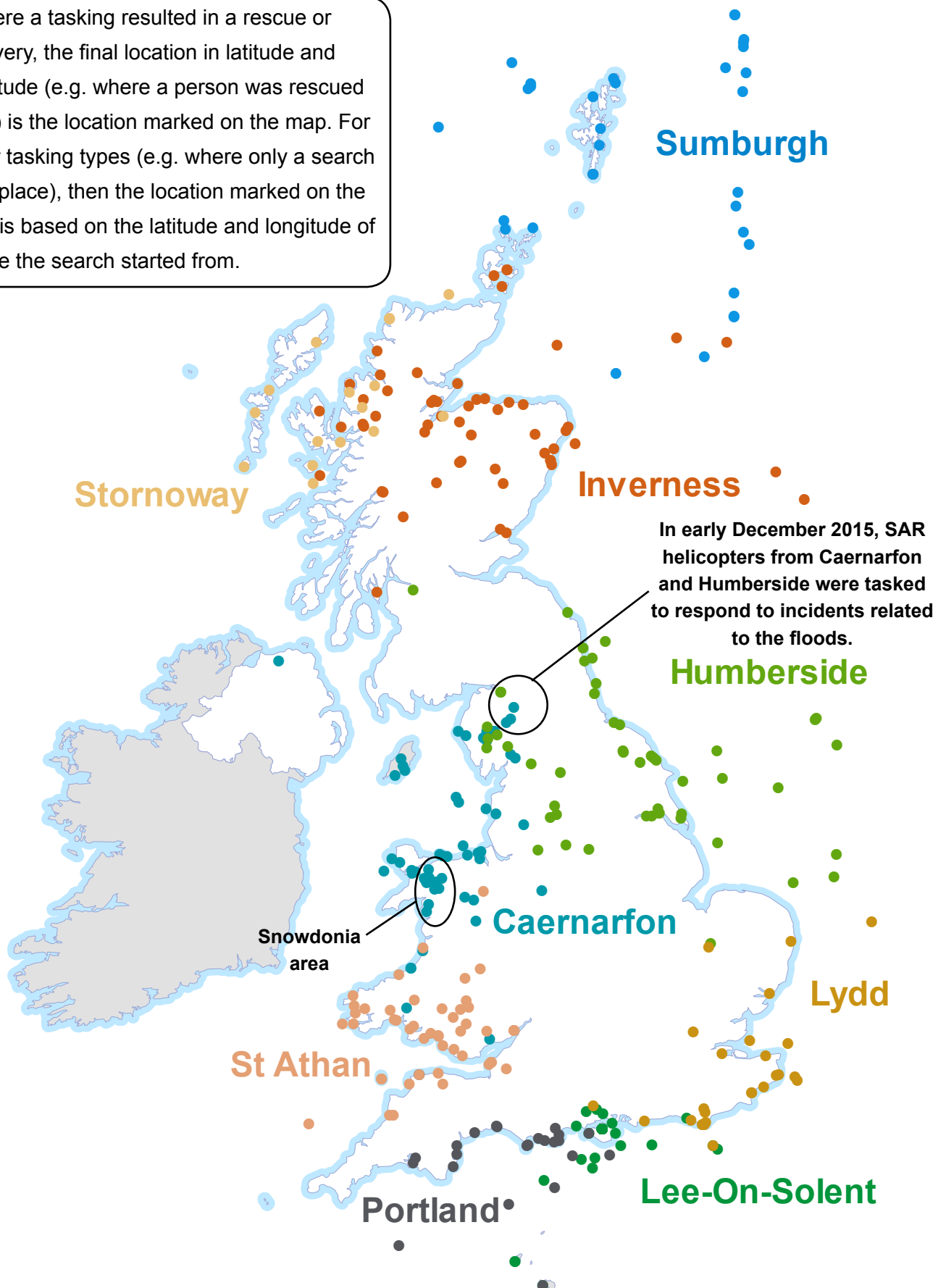
Chart 6: Number of taskings by time of day when the base was tasked, October to December 2015 (SARH0108)
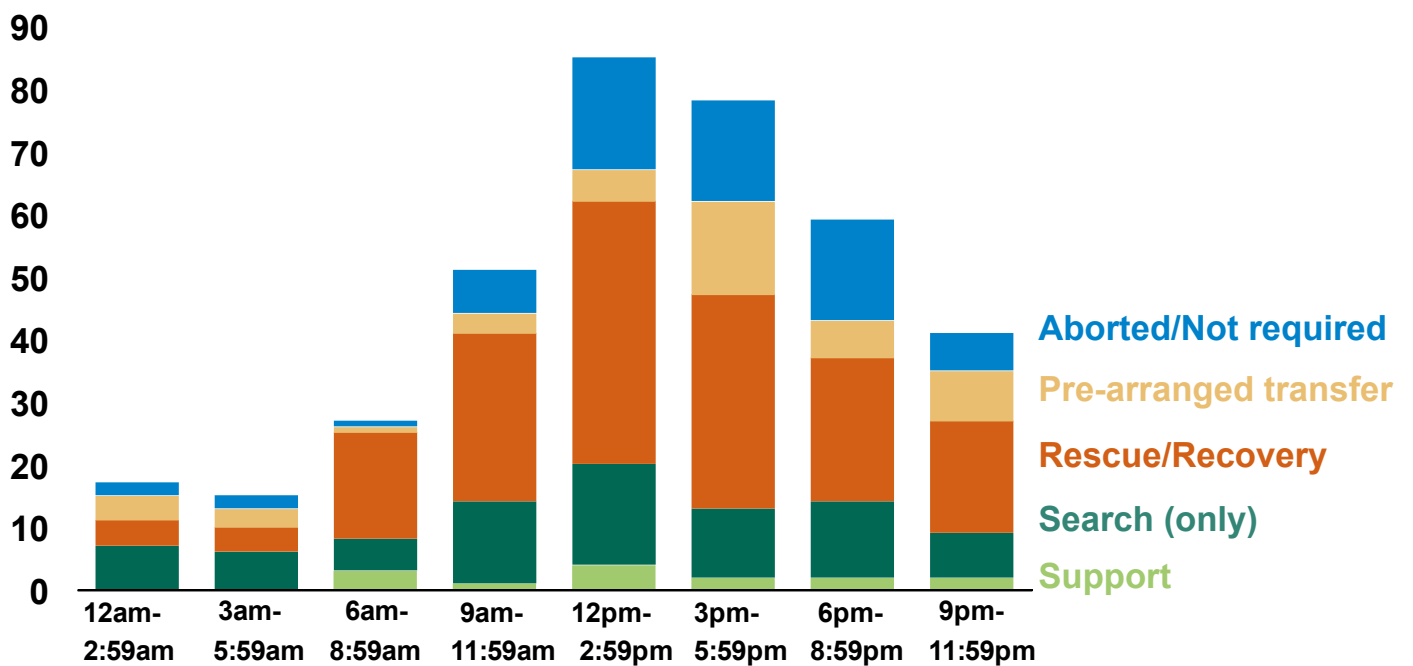
Map 2: Tasking location by base, October to December 2015

Where a tasking resulted in a rescue or recovery, the final location in latitude and longitude (e.g. where a person was rescued from) is the location marked on the map. For other tasking types (e.g. where only a search took place), then the location marked on the map is based on the latitude and longitude of where the search started from.

Sumburgh

Stornoway

Inverness

In early December 2015, SAR helicopters from Caernarfon and Humberside were tasked to respond to incidents related to the floods.

Humberside

Snowdonia area

Caernarfon

Lydd

St Athan

Lee-On-Solent

Portland

Map 3: Location of taskings by tasking category, October to December 2015

Where a tasking resulted in a rescue or recovery, the final location in latitude and longitude (e.g. where a person was rescued from) is the location marked on the map. For other tasking types (e.g. where only a search took place), then the location marked on the map is based on the latitude and longitude of where the search started from.
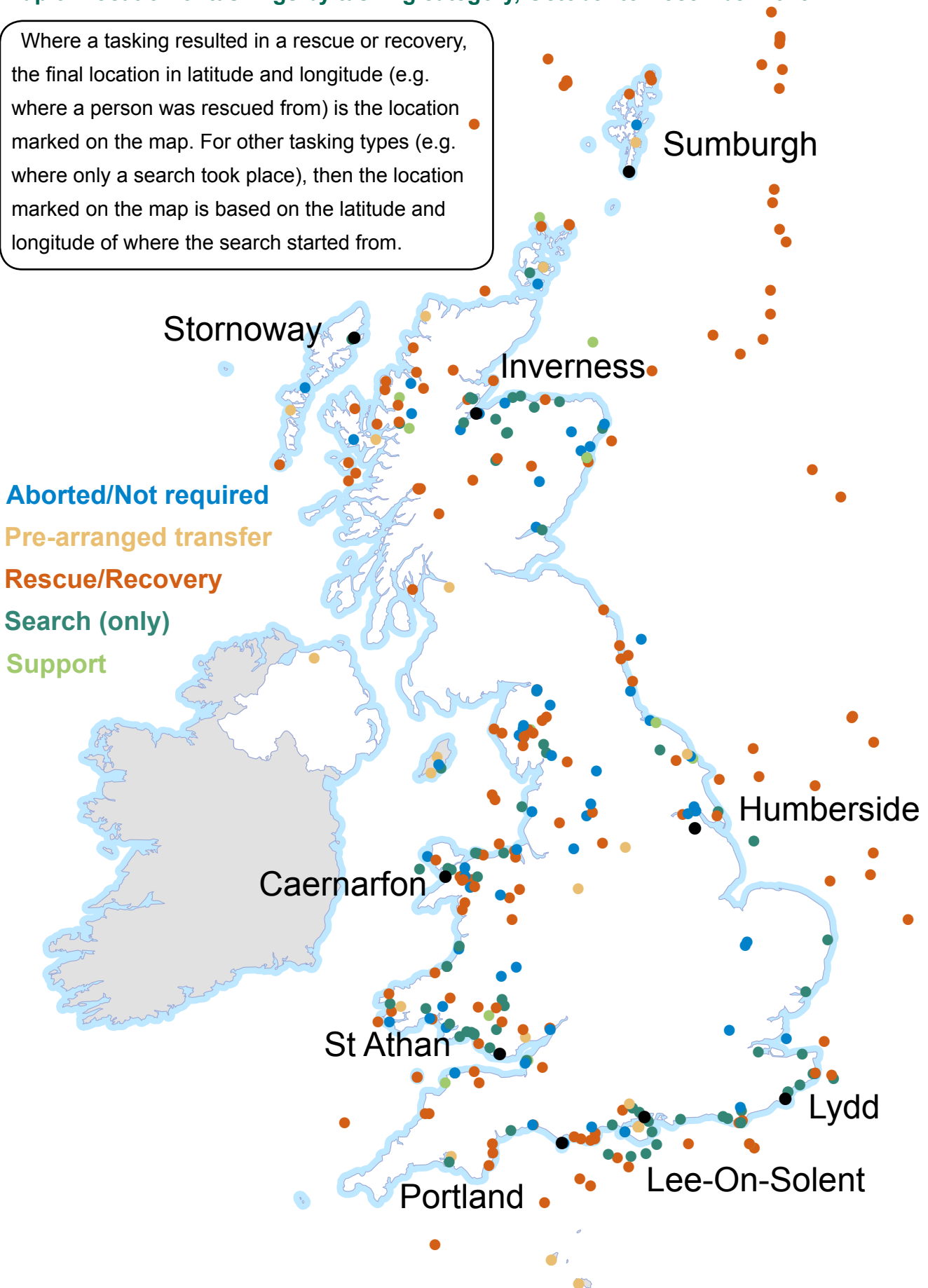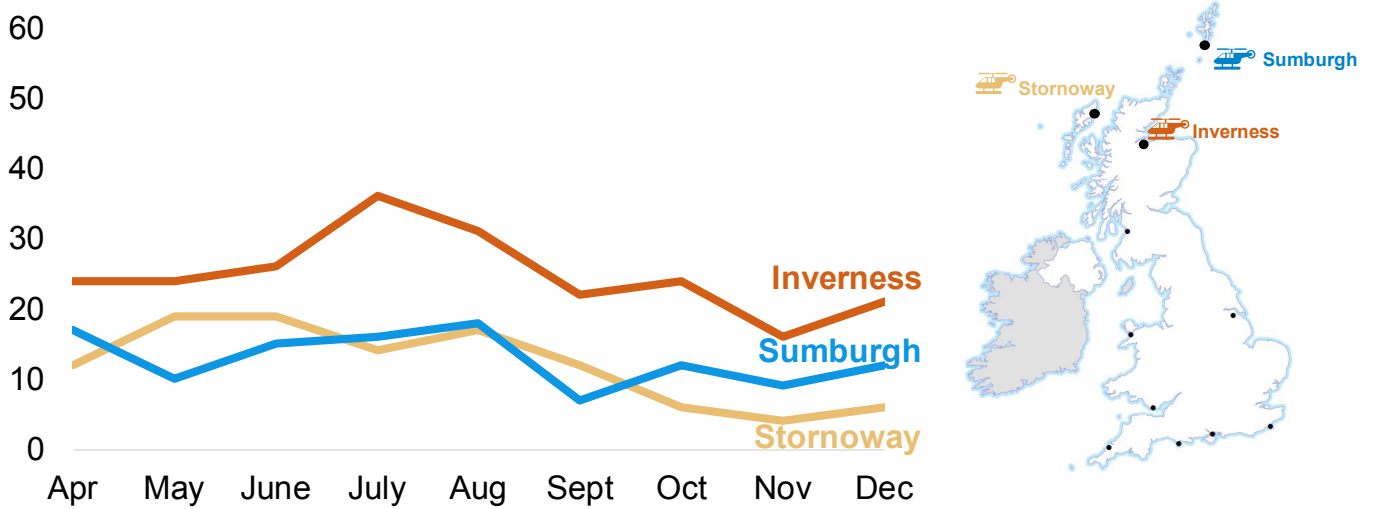
Sumburgh

Stornoway

Inverness

Aborted/Not required

Pre-arranged transfer

Rescue/Recovery

Search (only)

Support

Humberside

Caernarfon

St Athan

Lydd

Portland

Lee-On-Solent

Chart 7: Number of taskings from the Scotland bases, Apr to Dec 2015 (SARH0101)

Inverness consistently had the highest number of taskings of the Scotland bases throughout the period from April to December 2015, with 61 taskings from October to December. Inverness taskings accounted for just over half of all taskings from bases in Scotland during the last quarter.

All three bases in Scotland saw decreases in taskings from October to November, and increases from November to December.

Chart 8: Number of taskings from the Wales and Northern England bases, Apr to Dec 2015 (SARH0101)
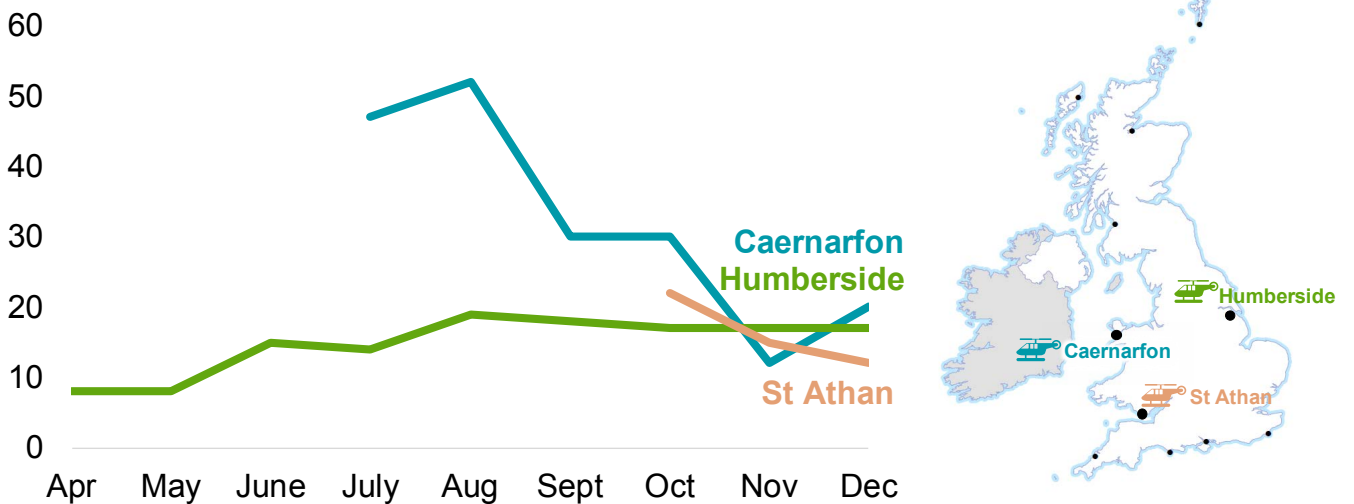

The St Athan base began operating in early October 2015, with 22 taskings in its first month, making it the third busiest of the nine United Kingdom bases during October.

Caernarfon was the busiest of all nine bases between October and December, with 62 taskings overall. This was largely due to a busy October, when 30 of the taskings happened. Around 4 in 10 of Caernarfon's taskings during the quarter were rescues/ recoveries, a number of which were within the Snowdonia National Park.

The Humberside base had a stable number of taskings over the period, with 17 in each of the three months, which was very similar to the previous quarter.

The Caernarfon and Humberside bases responded to six taskings in Cumbria during the floods in early December, when Storm Desmond brought heavy rainfall to many parts of the UK. Most of these taskings were rescues, and most included moving multiple persons.

Chart 9: Number of taskings from the Southern England bases, Apr to Dec 2015 (SARH0101)
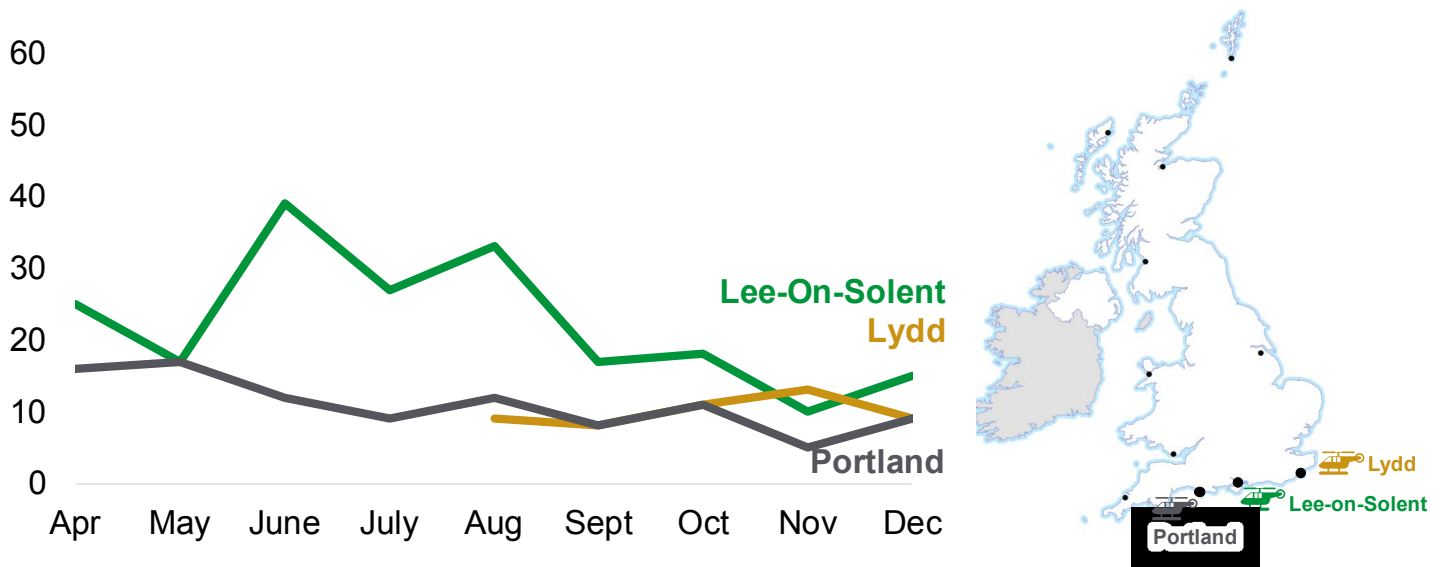
Lee-on-Solent was the busiest of the bases on the South Coast of England during October to December 2015, with 43 taskings during the period. Pre-arranged transfers accounted for 63 per cent of these, with the vast majority being transfers from the Isle of Wight to Portsmouth or Southampton. A smaller number were transfers from Guernsey or Jersey.

Between October and December, Lydd was the base with the highest proportion of searches, with 42 per cent of taskings involving searches during the quarter.
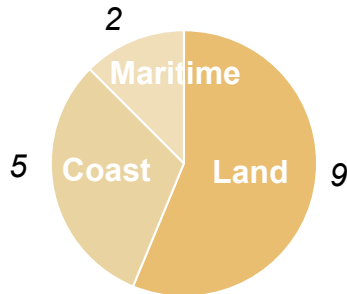
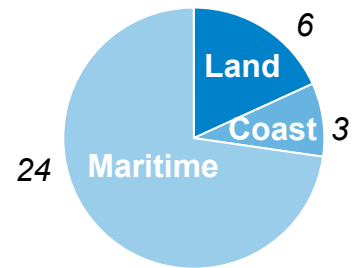## Map 4: Taskings by location type and base, October to December 2015 (SARH0104)

The numbers appearing on the outside of the pie charts represent the number of taskings that took place within each location type for each base.
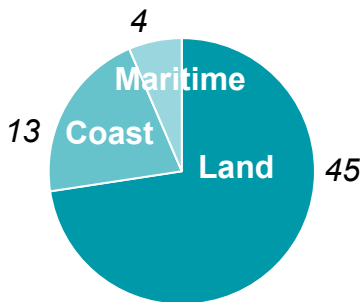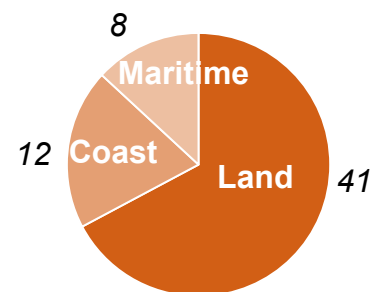
Stornoway

Maritime 2
Coast 5
Land 9

Sumburgh

Land 6
Coast 3
Maritime 24

Caernarfon

Maritime 4
Coast 13
Land 45

Inverness

Maritime 8
Coast 12
Land 41

St Athan

Maritime 2
Coast 22
Land 25

Humberside

Maritime 13
Coast 11
Land 27

Portland

Land 3
Maritime 5
Coast 17

Lee-On-Solent

Maritime 8
Coast 4
Land 31

Lydd

Maritime 6
Coast 14
Land 13
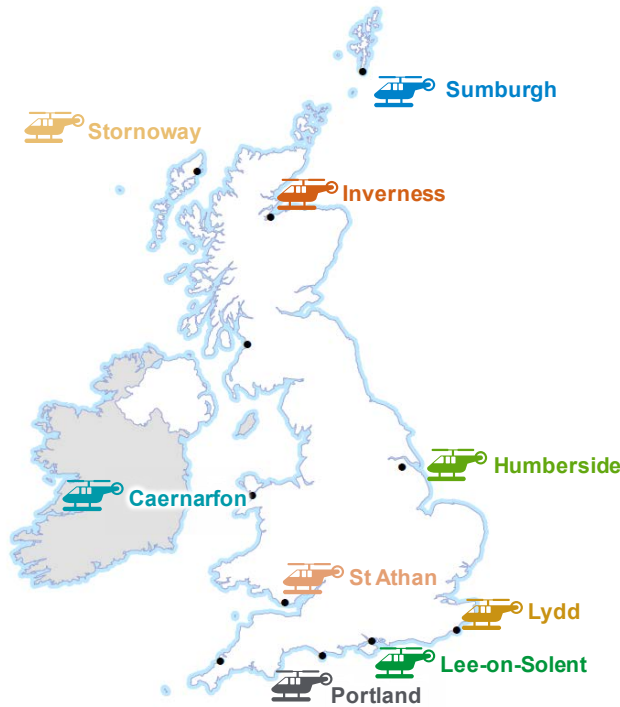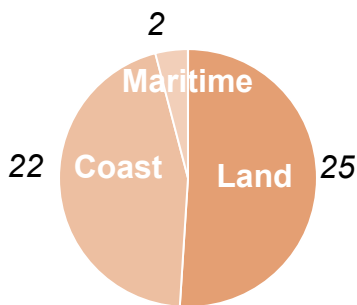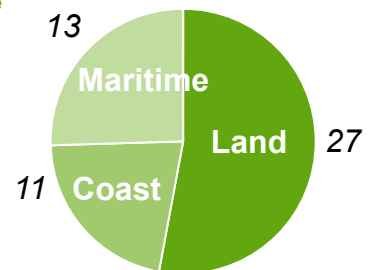
Map locations: Sumburgh, Stornoway, Inverness, Humberside, Caernarfon, St Athan, Lydd, Lee-on-Solent, Portland

Response to user feedback

On 18 November 2015, the Department for Transport published the first statistical release in this new experimental series. Alongside it, an online survey was launched, asking for feedback on the first release, and this ran until 31 January 2016.

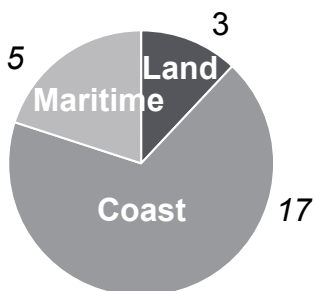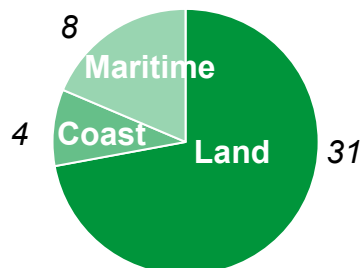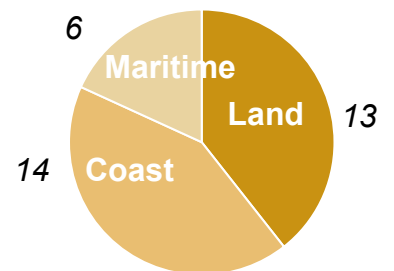These responses have now been collated and you can find a summary of the feedback, as well as a response from the Department, in the accompanying document *Response to User Feedback*.

We would be grateful for any further feedback that users have on the changes made so far to the series and on the developments that will be made over the coming months, so that we can consider how the release can better meet user needs and how the dissemination of information can be improved.

You can contact us by email to SARH.Stats@dft.gsi.gov.uk or phone 020 7944 4676.

We thank all respondents for taking the time to give us their views.

Strengths and weaknesses of the data

These data are derived from an administrative system used by the helicopter operators, and provided to DfT by the Maritime and Coastguard Agency (MCA).

Data are recorded for management information purposes and not directly for use in statistics. For this reason, they should be treated with caution.

The time spent on taskings, the time of day of the tasking and the day of the week are all thought to be recorded accurately and can be checked against information in the flight recording system of the helicopter that responded to the tasking. This information is therefore thought to be highly reliable.

If an emergency occurs where a helicopter is called out more than once, this is usually counted as one tasking. If helicopters from different bases are called out to the same emergency, this is counted separately - once for each base. This means that the definition of "taskings" is slightly different to the definitions of "callouts" and "incidents" used by the Ministry of Defence.

If a rescue or recovery takes place then the location is recorded by the helicopter pilot, based on the coordinates of where the persons were found. For other tasking types, the initial location (e.g. for where a search will take place) is recorded, as supplied by the tasking authority. Both of these methods have the possibility of human error, but this is thought to be low. It is not possible to assess whether the original coordinates provided to the tasking authority for a search were accurate.

The coordinates of the tasking location are also used to define the location type (land, coast and maritime). The latitude and longitude of the tasking location are overlaid onto a geographically accurate map of the UK, and distances between the taskings and the outline of the map are used to categorise the data. The definitions of the boundaries between land, coast and maritime were chosen based on other widely used definitions, what was sensible given the nature of the topic and what was possible using the data. This breakdown is only as accurate as the coordinate data.

If errors occur in the latitude or longitude then this may cause errors in the location type data. As mentioned above, the risk of error is thought to be low.

The tasking category (rescue/ recovery, pre-arranged transfer, etc.) is taken from a free text field completed by the helicopter operators and coded by database administrators at the MCA. The logic used in coding the data is documented and is kept consistent as far as is possible, but as this process is essentially conducted through individual interpretation, there will always be a potential for human error to be involved.

The data are validated and verified as they are received by the MCA, and signed off at the end of each month, so it is unlikely that data would be revised at a later date. Therefore, figures published in this release will be carried forward for use in future publications (for time comparisons, etc.) with any revisions being specifically pointed out to users.

As all fields are filled in by the contractors, there are no missing data.

There are currently few other sources to compare the data against. Data from the flight recording systems in the helicopters are used for verification, as mentioned above, but this can only be used to verify the timing and duration of the tasking. Data from the co-ordination centres that log the initial calls that request the search and rescue services will become available in 2016. There is currently little information available regarding what data will be useable from this source, but users will be updated on this in a future edition of the statistics release.

Users and uses of the data

As this is the second civilian search and rescue helicopter statistics release, we are still in the process of determining users and finding out how the data can be used.

Within the Department for Transport, they will be used:

- For ministerial briefing and to answer public enquiries;

- As background to policy development;

- For monitoring trends in search and rescue activity; and,

- By analysts in modelling overall search and rescue operations.

Outside of DfT, users include:

- Search and rescue partners, national parks, tourist boards, mountaineering/ walking groups and others, monitoring the use of search and rescue services by tourists/ members;

- Air ambulance charities monitoring SAR activity in their areas; and,

- Maritime organisations monitoring SAR activity related to their businesses (e.g. near ports).

Links to other information

- Historically, the Ministry of Defence published statistics on military and civilian SARH activity, and they continued to publish statistics on military activity until February 2016. Their final release can be found here: https://www.gov.uk/government/collections/military-search-and-rescue-quarterly-statistics-index

- Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: https://www.gov.uk/government/publications/pre-release-access-lists-for-maritime-and-shipping-series

- Eventually, the plan is to badge these statistics as National Statistics. National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure they meet customer needs: http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html

- Alongside this publication a series of data tables have been published, where you can find the key statistics: https://www.gov.uk/government/statistical-data-sets/search-and-rescue-helicopter.