### Statistical Release

### 1 March 2017



### Department for Transport

# About this

release

This release in part of an 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 or removed. This release covers the period 1 Oct 2016 to 31 Dec 2016.

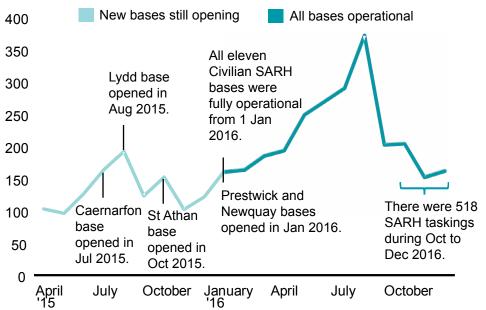
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### Search and Rescue Helicopter Statistics: October to December 2016

Between October and December 2016, Search and Rescue Helicopter (SARH) operators responded to 518 taskings in the UK.

### Total number of civilian SARH taskings, Apr 2015 to Dec 2016



Taskings responded to by the Caernarfon, Humberside, Lee-On-Solent and Lydd bases have increased compared to the same period in 2015.

### Summary of SARH taskings compared to one year previously.

	Oct to Dec 2015 taskings	Oct to Dec 2016 taskings	% change from one year before	
Caernarfon	62	72	懀 + 16%	
Humberside	51	71	+ 39%	
Inverness	61	44	- 28%	
Lee-On-Solent	43	47	+ 9%	
Lydd	33	41	<b>+</b> 24%	
Portland	25	23	- 8%	
St Athan	49	44	- 10%	
Stornoway	16	16	• 0%	
Sumburgh	33	24	- 27%	
Total	373	382	<b>+</b> 2%	
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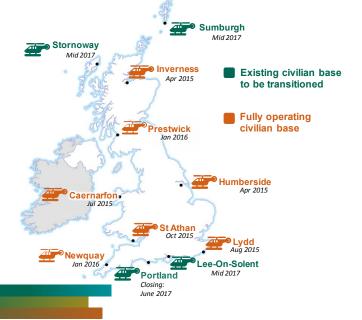
SARH.stats@dft.gsi.gov.uk

### **Background Information**

In April 2015, the operational phase of a new contract to operate civilian search and rescue helicopter (SARH) services in the UK, managed by the Maritime and Coastguard Agency (MCA), commenced. These new arrangements have taken over from the previous mixture of military and coastguard SARH services.

Department for Transport is now responsible for the production of statistics on SARH activity, covering the civilian bases.

#### Map 1: Civilian SAR Helicopter Bases, 2016

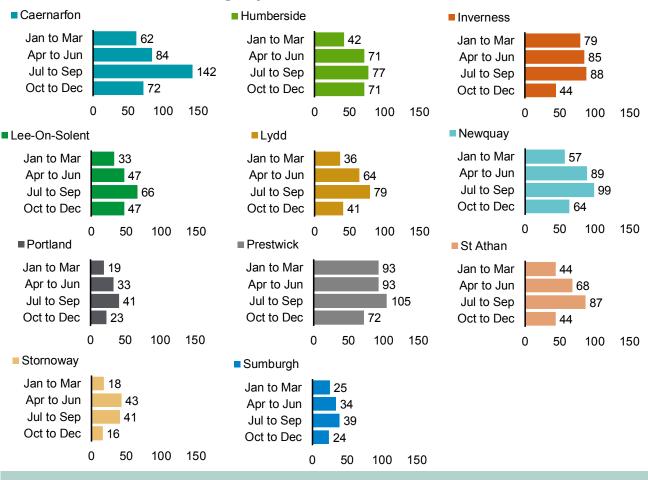


### **Overall Trends**

In October to December 2016, there were 518 taskings overall.

All civilian bases began fully operating in January 2016, since which both the Caernarfon and Prestwick bases had the highest monthly average of 30 taskings. They were also the busiest of the eleven bases during October to December 2016, each responding to 72 taskings.

#### Chart 1: Civilian SARH taskings by base, 2016 SARH0101



Of the eleven bases, Stornoway responded to the lowest number of taskings during October to December 2016 (16 taskings).

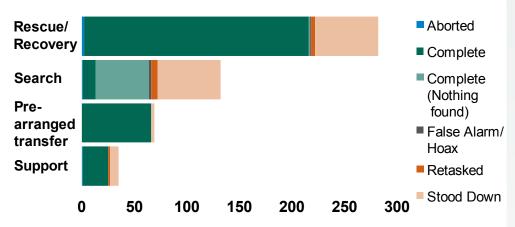
The nine bases which operated in the same period in 2015 responded to 382 taskings in the latest quarter - a 2 per cent increase from the 373 taskings responded to by these bases in the same period in 2015.

### **Tasking Categories**

There were 282 rescue or recovery taskings during October and December 2016, accounting for 54 per cent of all taskings. This proportion varied across the bases, from 30 per cent at Lee-on-Solent to 83 per cent at Sumburgh.

Of all pre-arranged transfers, 26 per cent were carried out by the Newquay base in the latest quarter. Together, Lee-On-Solent, Prestwick and Newquay responded to 68 per cent of all pre-arranged transfers during the latest period.

### Chart 2: Number of taskings by tasking category, October to December 2016 <u>SARH0102</u>



During the latest quarter, around 61 per cent of all taskings were completed and a further 10 per cent of taskings were completed but nothing found. Stood down taskings accounted for a quarter of all taskings.

Of all rescue or recovery taskings, 76 per cent were classed as complete whereas 21 per cent of rescue or recovery taskings were stood down.

There were 132 search taskings taking place in the latest quarter; the majority were either complete or complete but nothing found (48 per cent) or stood down (45 per cent).

### Definition

### **Tasking category**

**Rescue or Recovery:** The transfer of person(s) resulting in them being delivered to a safe environment (including medical facilities).

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

### **Pre-arranged Transfer:**

Transfer of patients or organs between medical establishments.

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

### **Tasking outcome**

Aborted: Tasking aborted due to weather unsafe for flight or technical/crew issues.

#### False Alarm/Hoax:

Unnecessary tasking with good or malicious intent.

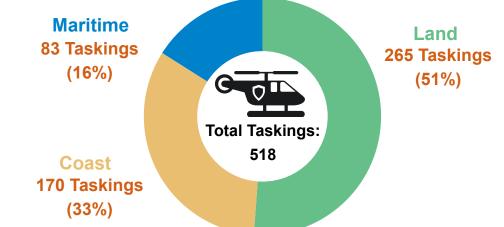
**Retasked:** Tasked to an incident of higher priority whilst en route

**Stood Down:** Another emergency service/ partner agency is in attendance and the asset is no longer required or the emergency has been resolved by other means.

### Location

Land based taskings accounted for over half of all taskings during October to December 2016. Maritime taskings accounted for 16 per cent of the total whilst 33 per cent of taskings took place in coastal areas.

### Chart 3: Proportion of taskings by location type, October to December 2016 <u>SARH0103</u>



### Definition -Land, coast and maritime

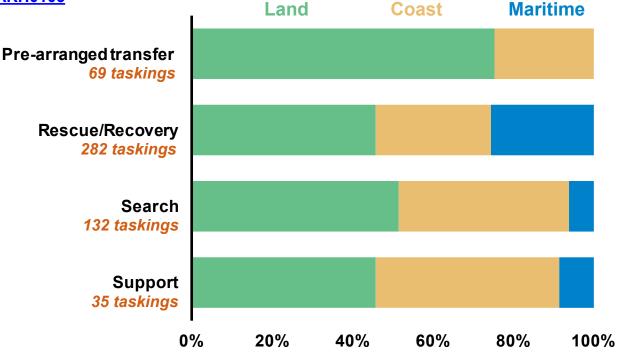
Coast: Taskings occurring between 0.2 miles inland and 3 nautical miles out to sea.

Maritime: Taskings that occur more than 3 nautical miles out to sea.

Land: All other taskings that are not classed as coastal or maritime.

Of all maritime taskings, the majority were rescues or recoveries during the latest quarter (87 per cent). This proportion was much smaller for the other location types, with rescues or recoveries accounting for just under half of all land based taskings (49 per cent), and coastal taskings (48 per cent).

# Chart 4: Proportion of taskings by category and location type, October to December 2016 SARH0105

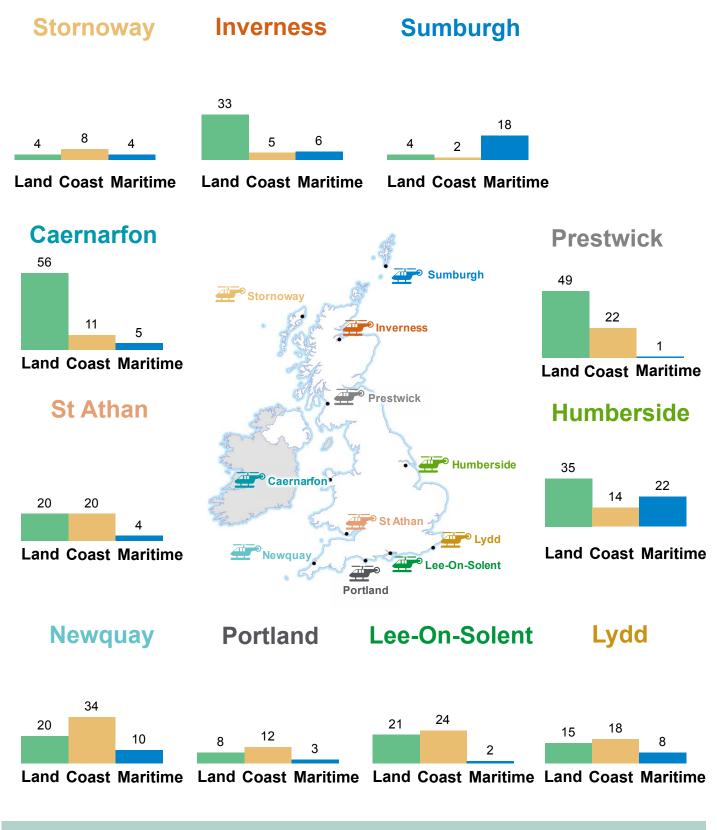


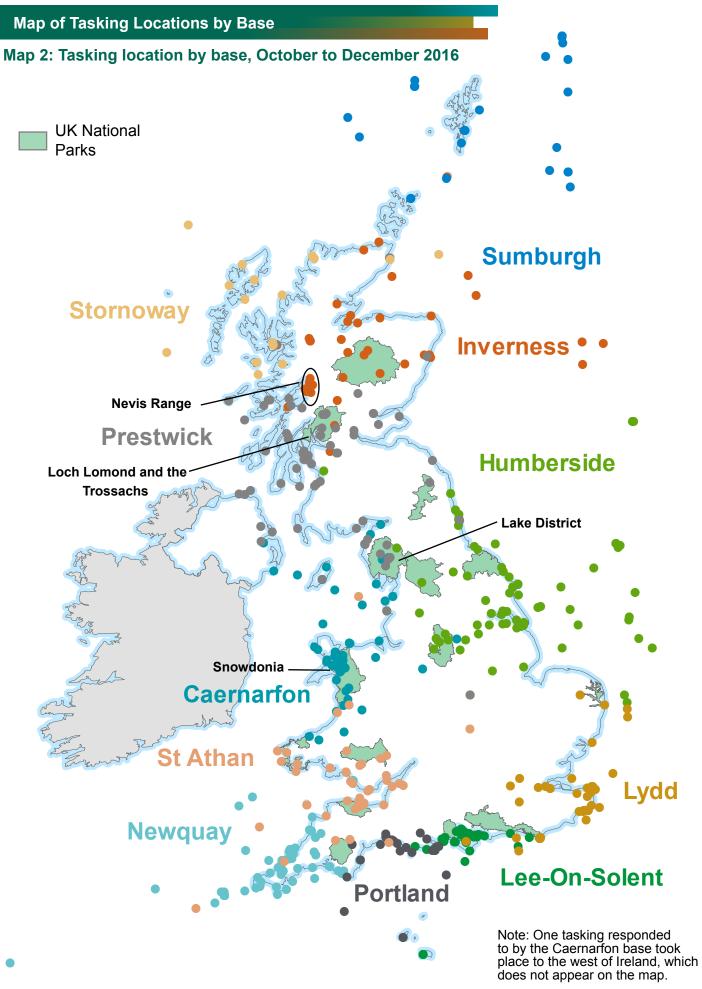
The majority of pre-arranged transfers took place on land (75 per cent) and around 94 per cent of searches took place on land or in coastal locations, showing that very few searches took place more than 3 nautical miles out to sea.

### Key Statistics by Location and Base

The location type of taskings differed between bases. During October to December 2016, Humberside responded to the most maritime taskings, Caernarfon responded to the most land based taskings and the Newquay base responded to the most coastal taskings.

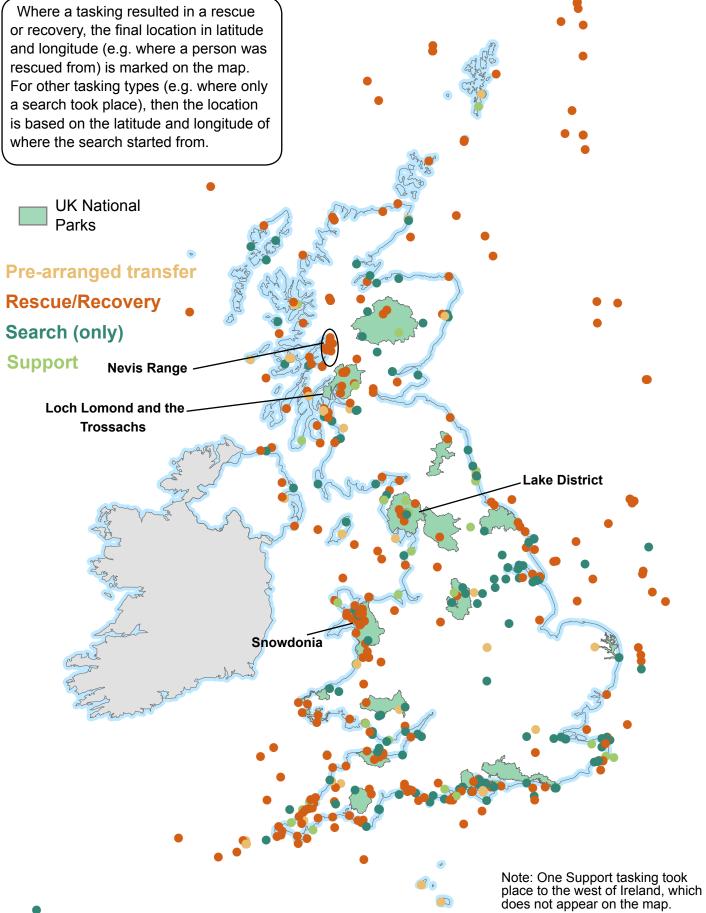
Map 1: Number of taskings by location type and base, October to December 2016 SARH0104





### Map of Tasking Category





### **Time Spent on Taskings**

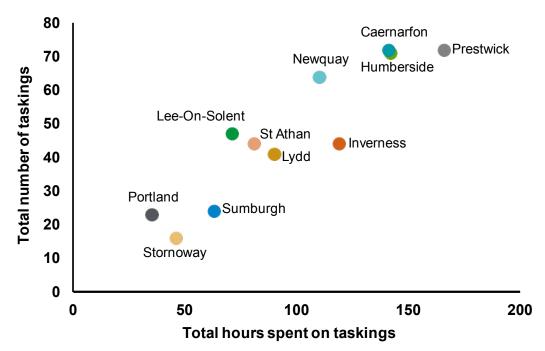
During October to December 2016, civilian SARH units spent 1,064 hours on taskings. Prestwick recorded the highest amount of total tasking time during the latest quarter, spending 166 hours on taskings (across 72 taskings) whilst Portland recorded the lowest amount of total tasking time, spending 35 hours on taskings (across 23 taskings).

Definition -Length of tasking Total number of flying hours over the period.

Taskings taking place in maritime locations or in mountainous areas such as the Nevis range or Snowdonia tended to take longer per tasking than in areas such

as the South Coast of England, where incidents tended to happen closer to the base and therefore took less time. For example, the Prestwick and Caernarfon base were both tasked 72 times during the latest quarter, but Prestwick taskings took 25 hours longer than Caernarfon taskings, demonstrating that Prestwick taskings tend to take longer.

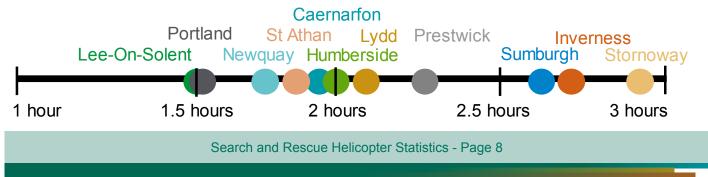
### Chart 5: Total taskings and total time spent on taskings, October to December 2016 SARH0106

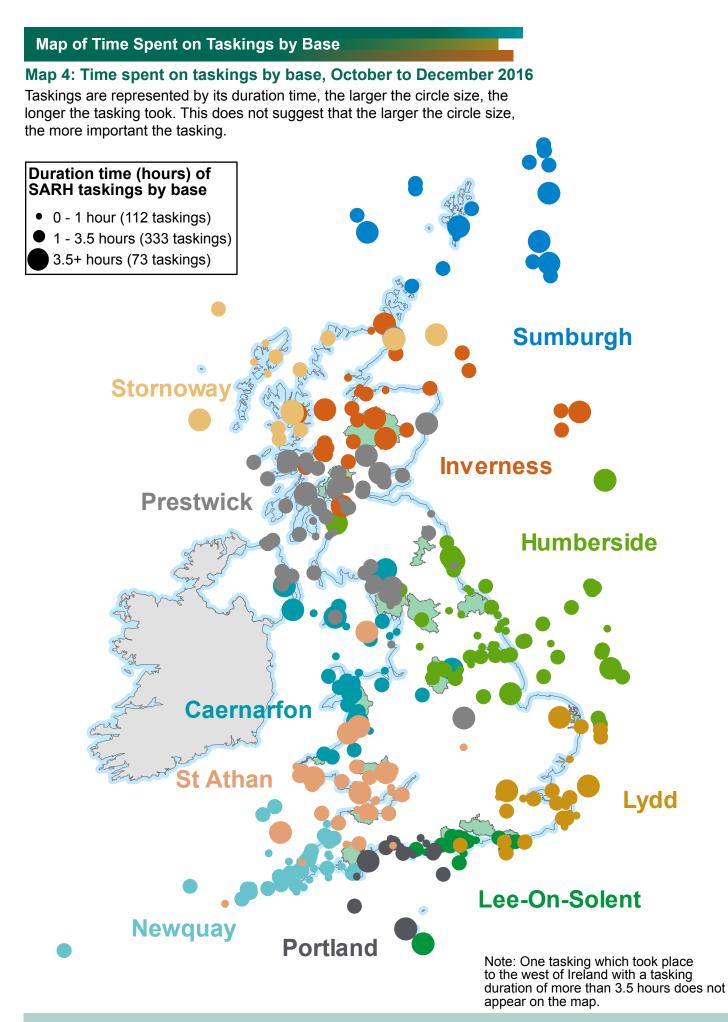


### Average duration time

Stornoway spent an average of 2.9 hours per tasking during the latest quarter. Although Stornoway responded to one of the lowest number of taskings in the latest period, taskings tended to take longer as the majority of Stornoway taskings took place out at sea.

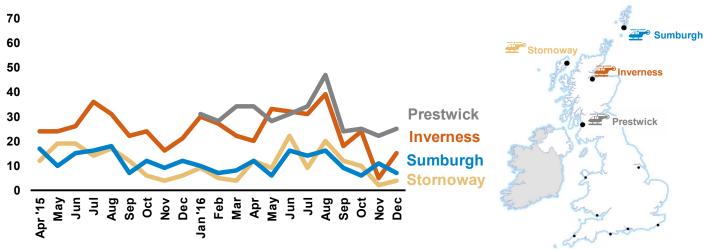






#### **Taskings by Base**

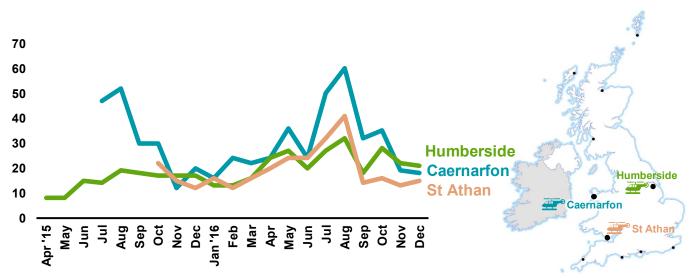
### Chart 6: Number of taskings from the Scotland bases, April 2015 to December 2016 <u>SARH0101</u>



The Prestwick base responded to the highest number of taskings of all Scotland bases during October to December 2016, with 72 taskings. All four Scotland bases had a peak number of taskings in August 2016 where Prestwick responded to a peak of 47 taskings in August, the highest monthly number for this base since it began operating in January 2016.

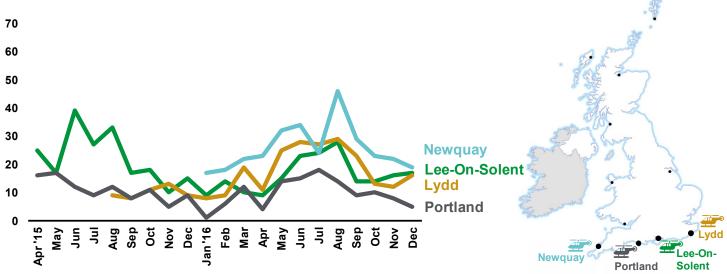
In the latest quarter, taskings at both the Inverness and Sumburgh bases reduced by 28 per cent and 27 per cent respectively compared to the same period in 2015.

## Chart 7: Number of taskings from the Wales and Northern England bases, April 2015 to December 2016 <u>SARH0101</u>



Between October and December 2016, Caernarfon was the busiest of the three bases in Wales and Northern England, with 72 taskings during the period. Taskings at the Humberside base increased by 39 per cent in the latest quarter compared to the same period last year and responded to 71 taskings during the latest quarter. Taskings responded to by the St Athan base decreased by 10 per cent compared to the same quarter last year.

### Chart 8: Number of taskings from the Southern England bases, April 2015 to December 2016 SARH0101



The Newquay base began operating in January 2016 and was the busiest of the Southern England bases, responding to 64 taskings during October to December 2016. Since January 2016, Portland responded to an average of 10 taskings per month, whilst Newquay responded to an average of 26 taskings per month.

The number of taskings responded to by the Lydd base between October and December 2016 has increased by 24 per cent compared to the same quarter in 2015. Taskings responded to by the Lee-On-Solent base increased by 9 per cent whilst Portland taskings decreased by 8 per cent compared to the same quarter in 2015.

### **User Feedback and Future Releases**

This experimental statistics series is under continuous development as we gain views from users and learn more about the data. These statistics will be published each quarter. The Annual release will also include a breakdown by region (West Midlands, South East, Wales, etc), day of the week and time of day. This will be released after the end of each financial year.

We would be grateful for any <u>feedback</u> that users have on this publication, including content, timing, format or on any of the changes made so far to the series so that we can consider how the release can better meet user needs and how the dissemination of information can be improved.

For any queries relating to the statistics present in the release, you can contact us by emailing <u>SARH.Stats@dft.gsi.gov.uk</u>. For queries relating to other SARH areas, please contact <u>SAR.data@mcga.gov.uk</u>.



To hear more about DfT statistics publications as they are released, please follow us on Twitter via our <u>@DfTstats account</u>. TWITTER, TWEET, RETWEET and the Twitter logo are trademarks of Twitter, Inc. or its affiliates. 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. This should be taken into account when interpreting the results.

### Tasking count

A tasking is defined as the response of a SAR helicopter to an emergency as notified by the Aeronautical Rescue Coordination Centre (ARCC). 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. The statistics also include those taskings which have been stood down before lift-off. The reason being that there is a lot of activity which takes place prior to the actual lift-off whereby time and resourcing are being used.

### Tasking category

The tasking category (rescue or recovery, pre-arranged transfer, etc.) is derived from a free text field completed by the helicopter operators and coded by database administrators at the MCA.

There has been an update to the methodology of the tasking category data from July 2016 onwards. This publication includes a more thorough breakdown of the type of tasking the base responded to including whether the task was complete, stood down etc. Therefore, it will not be possible to compare the latest data to previous results. The breakdown for previous quarters will become available in summer 2017.

### Tasking location

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. If a pre-arranged transfer occurs, some operators may record the mid point of the tasking in the database, which could mean the tasking will have been recorded to take place over maritime when in fact, should be classed as coast or land. There are checks in place to make sure all taskings involving pre-arranged transfers are consistent and uses the final location of the tasking. For other tasking types, the initial location (e.g. for where a search will take place) is recorded, as supplied by the tasking authority. 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 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 latitude or longitude are recorded inaccurately then this may also impact upon the location type, although the risk of such inaccuracies is perceived as low.

### **Duration Time**

The time spent on tasking is calculated by the difference of time of when the helicopter rotors were turned on (start of the tasking) and then turned off (end of the tasking). This data is 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.

### **Data Validation**

The logic used in coding the data is documented and is kept consistent as far as is possible, but as this process is reliant upon individual interpretation it may vary depending on the operator. There will always be a possibility that a small number of inaccuracies are present in this data.

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.). If there are any revisions, they will be clearly signposted 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. Any anomalies in the data can be checked against the flight recording system for verification, as mentioned above, but this can only be used to verify the timing and duration of the tasking. We are considering the use of the coordination centre data that log the initial calls that request the search and rescue service for future statistical publications. An update will be provided as part of the SARH 2016/17 annual release in June 2017.

### Users and Uses of the Data

As this is the sixth 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 Department for Transport and Maritime Coastguard Agency, 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, Ministry of Defence published statistics on military and civilian SARH activity, and they continued to publish statistics on military activity until February 2016 when services were ceased. Their final release can be found here: <a href="https://www.gov.uk/government/collections/military-search-and-rescue-quarterly-statistics-index">https://www.gov.uk/government/collections/ military-search-and-rescue-quarterly-statistics-index</a>
- Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: <u>https://www.gov.uk/government/publications/pre-</u><u>release-access-lists-for-maritime-and-shipping-series</u>
- Eventually, we aim 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: <u>http://www.
  statisticsauthority.gov.uk/assessment/code-of-practice/index.html</u>
- Alongside this publication a series of data tables have been published, where you can find the key statistics: <u>https://www.gov.uk/government/statistical-data-sets/search-and-rescue-helicopter</u>.