

### Search and Rescue Helicopter **Statistics: July to September 2016**

#### **About this** release

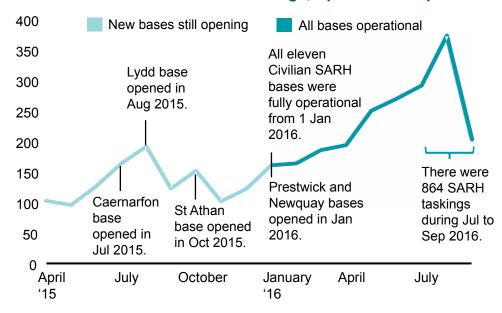
This release in part of an experimental statistics series covering civilian search and rescue helicopter (SARH) operations in the UK. Totals in this series will change considerably during the transition period, as statistics for the new bases are added. This release covers the period 1 July 2016 to 30 September 2016.

In this publication

Background Infop2
Overall trendsp2
Tasking category p3
Locationp4
Key statistics by basep5
Map of tasking locationp6
Map of tasking categoryp7
Time spent on taskingsp8
Map of duration time p9
Taskings by basep10
User feedback p12
Strengths & weaknesses p12
Users and uses of data p14
Links p14

Between July and September 2016, Search and Rescue Helicopter (SARH) operators responded to 864 taskings in the UK.

Total number of Civilian SARH taskings, Apr 2015 to Sep 2016



Taskings responded to by the Caernafron, Humberside and Portland bases have increased compared to the same period in 2015.

Summary of SARH taskings compared to one year previously.

	Jul to Sep 2015 taskings	Jul to Sep 2016 taskings	% change from one year before
Caernarfon	129	142	+ 10%
Humberside	51	77	+ 51%
Inverness	89	88	- 1%
Lee-On-Solent	77	66	- 14%
Portland	29	41	+ 41%
Stornoway	43	41	- 5%
Sumburgh	41	39	- 5%
Total	459	494	+ 8%

RESPONSIBLE STATISTICIAN: **FURTHER INFORMATION:** 

Davita Patel

Media: 020 7944 4312

SARH.stats@dft.gsi.gov.uk

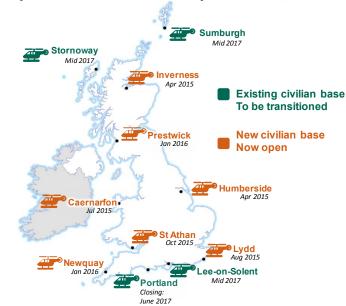


#### **Background Information**

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.

The 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 July to September 2016, there were 864 taskings overall. Of the seven bases which operated in the same period in 2015, these bases responded to 494 taskings in the latest quarter - an 8 per cent increase from the 459 taskings responded to by these bases in the same period in 2015.

Since January 2016, both the Caernarfon and Prestwick bases had the highest monthly average of 32 taskings. The Caernarfon base was the busiest of the eleven bases during July to September 2016, responding to 142 taskings with a peak in August (60 taskings).

Chart 1: Civilian SARH taskings by base, 2016 SARH0101

		Jan – Mar	2016 Apr – Jun	Jul – Sep	
Civilian SAR-H Base	Caernarfon	62 Taskings	84 Taskings	142 Taskings	The Prestwick base began operating after January 2016 and responded to 105 taskings in the latest quarter, the second busiest base after Caernarfon. Of the eleven bases, Portland, Stornoway and Sumburgh responded to the lowest number of taskings during July to September 2016.
	Humberside	42 Taskings	71 Taskings	77 Taskings	
	Inverness	79 Taskings	85 Taskings	88 Taskings	
	Lee-On-Solent	33 Taskings	47 Taskings	66 Taskings	
	Lydd	36 Taskings	64 Taskings	79 Taskings	
	Newquay	57 Taskings	89 Taskings	99 Taskings	
	Portland	19 Taskings	33 Taskings	41 Taskings	
	Prestwick	93 Taskings	93 Taskings	105 Taskings	
	St Athan	44 Taskings	68 Taskings	87 Taskings	
	Stornoway	18 Taskings	43 Taskings	41 Taskings	
	Sumburgh	25 Taskings	34 Taskings	39 Taskings	

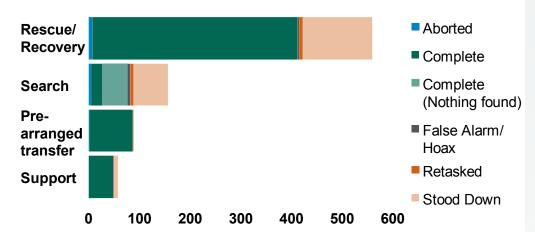
#### **Tasking Categories**

There has been an update to the methodology of the tasking category data. 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. Revised figures for previous data will become available in summer 2017.

There were 560 rescue or recovery taskings during July to September 2016, accounting for nearly two thirds of all taskings (65 per cent). This proportion varied across the bases, from 41 per cent at Lee-on-Solent to 87 per cent at Sumburgh.

Of all pre-arranged transfers, 38 per cent were carried out by the Newquay base in the latest quarter. Together, Lee-on-Solent, Prestwick and Newquay responded to 73 per cent of all pre-arranged transfers during the latest period.

Chart 2: Number of taskings by tasking category, July to September 2016 SARH0102



Around two thirds (65 per cent) of all taskings were completed, a further 6 per cent were completed but nothing found (this was in the case of search taskings) whereas 25 per cent of taskings were stood down.

Of all rescue or recovery taskings, 73 per cent were classed as complete whereas 24 per cent of rescue or recovery taskings were stood down.

There were 157 search taskings taking place in the latest quarter; the majority were either complete or complete but nothing found (46 per cent) or stood down (44 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.

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

#### False Alarm/Hoax:

Unnecessary tasking with good or malicious intent.

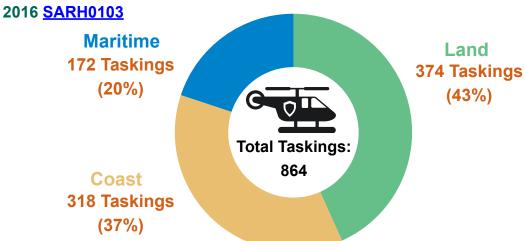
Retasked: Tasked to an incident of higher priority whilst en route

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 43 per cent of all taskings during July to September 2016. Maritime taskings accounted for 20 per cent of the total whilst 37 per cent of taskings took place in coastal areas.

Chart 3: Proportion of taskings by location type, July to September



#### Definition -Land, coast and maritime

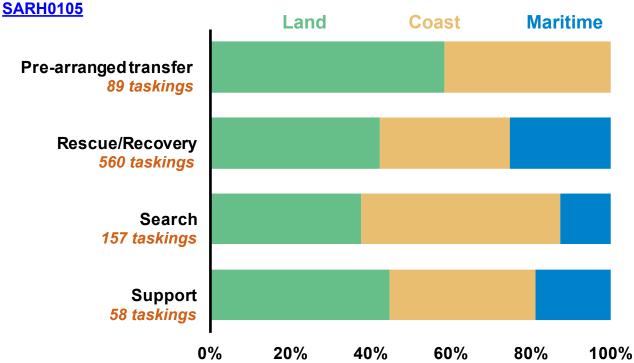
Coast: Taskings occurring between 0.2 miles inland and 3 nautical miles out to sea.

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, 82 per cent were rescues or recoveries during the latest quarter. This proportion was much smaller for the other location types, with rescues or recoveries accounting for around 63 per cent of all land based taskings, and 57 per cent of coastal taskings.

Chart 4: Proportion of taskings by category and location type, July to September 2016

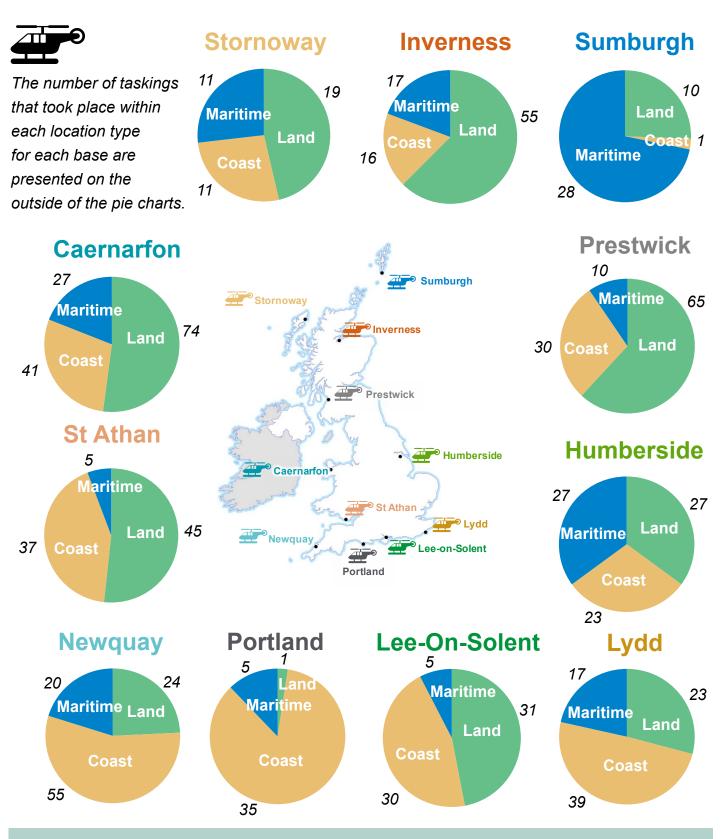


The majority of pre-arranged transfers took place on land (58 per cent) and around 87 per cent of searches took place on land or in coastal locations, showing that very few searches took place more than 3 nautical miles out to sea.

#### **Key Statistics by Location and Base**

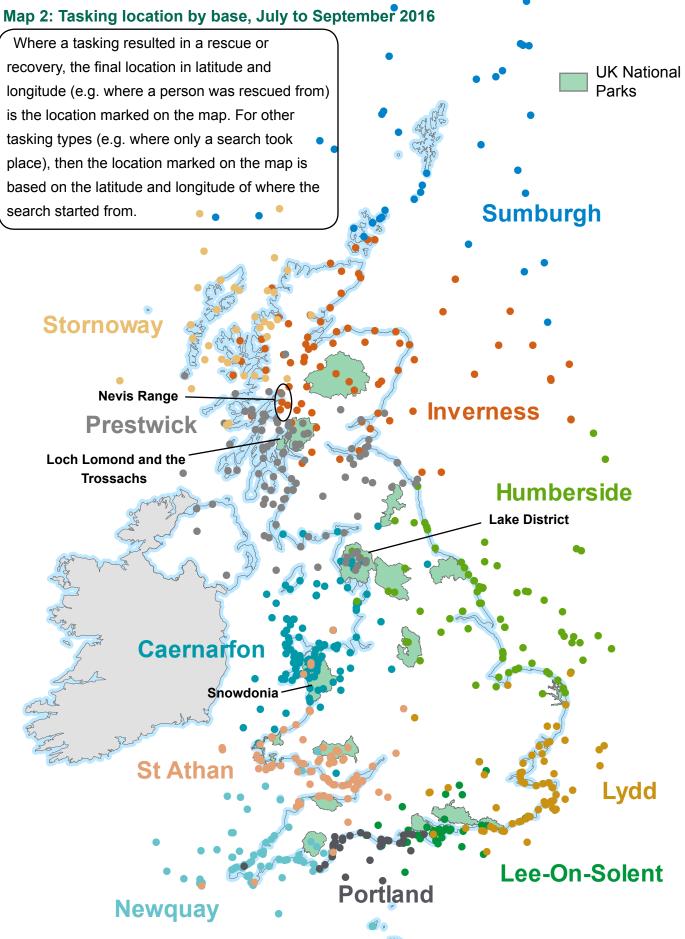
The location type of taskings differed between bases. During July to September 2016, Sumburgh responded to the most maritime taskings, Caernarfon responded to the most land based taskings and the Newquay base responded to the most coastal taskings.

Map 1: Number of taskings by location type and base, July to September 2016 SARH0104



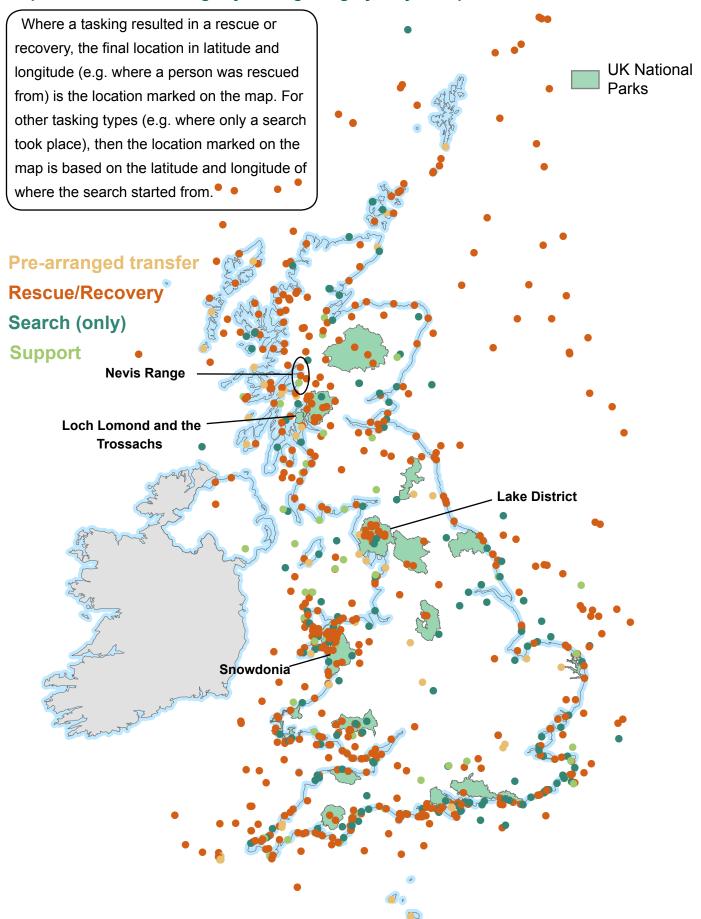
Search and Rescue Helicopter Statistics - Page 5

# Map of Tasking Locations by Base



#### **Map of Tasking Category**

Map 3: Location of taskings by tasking category, July to September 2016



#### **Time Spent on Taskings**

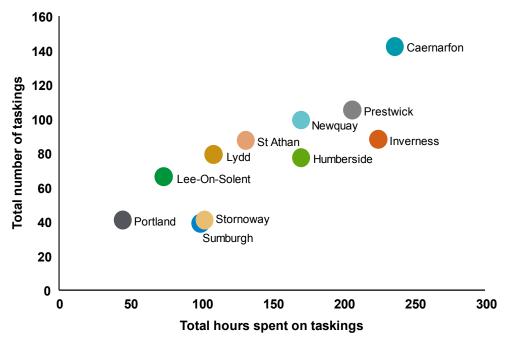
During July to September 2016, civilian SARH units spent 1,607 hours on taskings. Caernarfon recorded the highest amount of total tasking time during the latest quarter, spending 240 hours on taskings (across 142 taskings). Inverness recorded the second highest time spent on taskings, spending 228 hours on taskings (across 88 taskings) during the latest quarter.

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

Similarly to the previous quarter, the Portland base spent the least amount of time on taskings with 48 hours (across 41 taskings).

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.

Chart 5: Total taskings and total time spent on taskings, July to September 2016 SARH0106



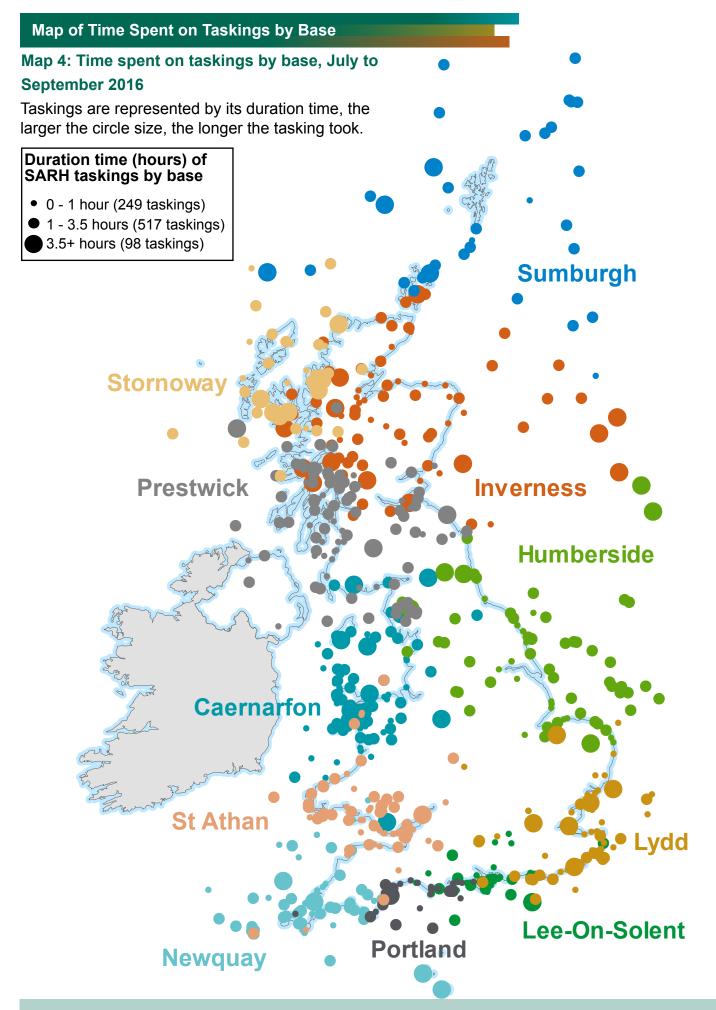
Humberside and
Newquay equally spent
174 hours on taskings
during the latest quarter,
but Newquay responded
to 22 more taskings
than Humberside,
demonstrating that
Humberside taskings
tend to take longer.

#### Average duration time

Overall, Sumburgh spent an average of 2.6 hours per tasking during the latest quarter. Although Sumburgh responded to the lowest number of taskings in the latest period, taskings tended to take longer as the majority of Sumburgh taskings took place out at sea. Caernarfon spent an average of 1.7 hours per tasking whilst Portland and Lee-On-Solent spent an average of around 1.2 hours per tasking.

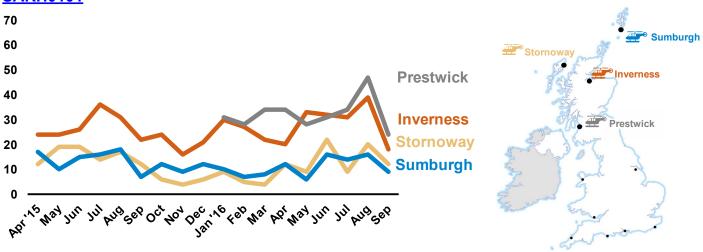
Chart 5: Average duration time of taskings, July to September 2016





#### Taskings by Base

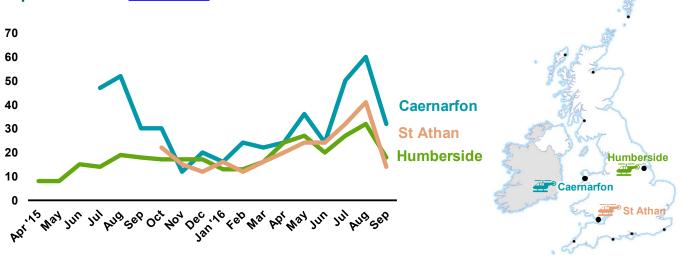
Chart 6: Number of taskings from the Scotland bases, April 2015 to September 2016 SARH0101



The Prestwick base responded to the highest number of taskings of all Scotland bases during July to September 2016, with 105 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 Sumburgh and Stornoway bases declined by 5 per cent compared to the same period in 2015. Inverness taskings dropped by 1 per cent compared to the same period in 2015.

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



Between July and September 2016, Caernarfon was the busiest of the three bases in Wales and Northern England, with 142 taskings during the period. Taskings at the Humberside base increased by 51 per cent in the latest quarter compared to the same period last year. The Caernarfon base began operating in July 2015 and has seen a 10 per cent increase in taskings this quarter compared to the same time period last year.

Taskings responded to by the Caernarfon base saw its monthly peak of 60 taskings in August 2016 - the highest monthly tasking since the base opened in July 2015.

2016 **SARH0101** 70 60 50 40 Newquay 30 Lydd 20 ee-On-Solent 10 **Portland** boing May Inc. In big sed Og May Dec Vive tep May bot May Inc. In big sed

Chart 8: Number of taskings from the Southern England bases, April 2015 to September

The Newquay base began operating in January 2016 and was the busiest of the Southern England bases, responding to 99 taskings during July to September 2016, with a peak of 46 taskings in August.

Solent

The number of taskings responded to by the Lee-On-Solent and Portland bases remained similar to the corresponding period last year - these bases responded to 107 taskings in the latest quarter comapred to 106 taskings the year before.

#### **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 <a href="mailto:SARH.Stats@dft.gsi.gov.uk">SARH.Stats@dft.gsi.gov.uk</a>. For queries relating to other SARH areas, please contact <a href="mailto:SAR.data@mcga.gov.uk">SAR.data@mcga.gov.uk</a>.

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. Revised figures for previous data 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. 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 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 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. Data from the co-ordination centres that log the initial calls that request the search and rescue services will become available in early/mid 2017. 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 fifth 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 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, the 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: <a href="https://www.gov.uk/government/publications/pre-release-access-lists-for-maritime-and-shipping-series">https://www.gov.uk/government/publications/pre-release-access-lists-for-maritime-and-shipping-series</a>
- 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: <a href="http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a>
- Alongside this publication a series of data tables have been published, where you can find the key statistics: <a href="https://www.gov.uk/government/statistical-data-sets/search-and-rescue-helicopter">https://www.gov.uk/government/statistical-data-sets/search-and-rescue-helicopter</a>.