Statistical Release

14 June 2017



Department for Transport

About this release

This release is part of an experimental statistics series covering civilian search and rescue helicopter (SARH) operations in the UK. The data are derived from an administrative system used by the helicopter operators, and provided to DfT by the Maritime and Coastguard Agency (MCA). This release covers the period 1 April 2016 to 31 March 2017.

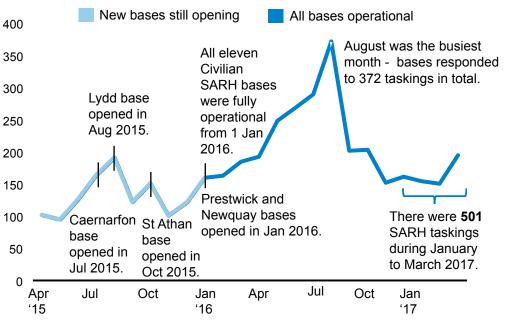
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Search and Rescue Helicopter Statistics: Year ending March 2017

There were 2,594 civilian search and rescue helicopter (SARH) taskings in the UK for the year ending March 2017.

Total number of civilian SARH taskings, Apr 2015 to Mar 2017





On average, SAR helicopters across the UK responded to 7 taskings a day during the year ending March 2017. The busiest base during the year was Caernarfon which handled 344 taskings. The least busy bases were Portland and Stornoway, responding to 123 taskings each.



Of all taskings, 59% were rescue or recovery during the year. The Sumburgh base had the highest proportion of rescue or recovery taskings (87%) with the majority taking place out to sea.



The summer period had more taskings compared to other seasons. This is likely to be due to greater leisure activity. In August 2016, SAR helicopters responded to 372 taskings - the highest monthly number during the year ending March 2017.

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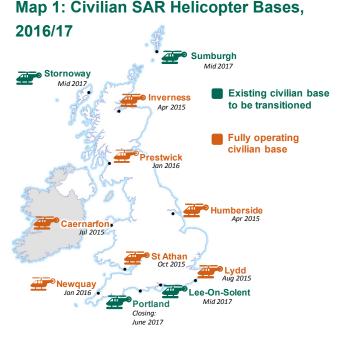
Introduction

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 (DfT) is now responsible for the production of statistics on SARH activity, covering the civilian bases.

All civilian bases are now operational. The Portland base will cease operation on 30th June 2017.



Data sources

The statistics presented in this release are based on data derived from an administrative system used by the helicopter operators, and provided to DfT by the Maritime and Coastguard Agency (MCA). As a result of enhanced data collection, the data source used to produce the civilian SARH statistics will be transitioning to a new source which will be incorporated into the next statistical release (covering taskings from April 2017 onwards), publishing in summer 2017.

The new data source originates from the Aeronautical Rescue Coordination Centre (ARCC). ARCC are responsible for the co-ordination of the search and rescue helicopters, from answering the initial request through to the conclusion of the tasking. The transition to the new data source will allow us to work with more detailed information, which has been assessed by DfT and the MCA.

You can find more information on the forthcoming changes in this document here: <u>https://www.gov.</u> <u>uk/government/statistics/search-and-rescue-helicopter-statistics-year-ending-march-2017</u>

The document sets out the proposed changes to the production of the SARH series and how we are responding to user feedback.

Interactive maps

DfT have developed an interactive map for users to further explore the data in this release: <u>http://maps.dft.gov.uk/sarh-statistics/</u>. The map highlights each tasking in greater detail, including the type of tasking, location and duration time and encompasses the data in table <u>SARH0112</u>. We would be grateful for any comments users have about this online tool to further improve the presentation of these maps in the future.

Overall trends

In the year ending March 2017, there were 2,594 taskings. Taskings increased by 54% compared to the previous year due to bases still opening in the 2015/16 period. The Caernarfon base began operating in July 2015, Lydd in August 2015, St Athan in October 2015 and the Newquay and Prestwick bases in January 2016.

During the year ending March 2017, both the Caernarfon and Prestwick bases responded to the highest monthly average of 29 taskings. Caernarfon was the busiest of the eleven bases for the year responding to 344 taskings and Prestwick was the second busiest responding to 342 taskings.

Definition

Tasking count

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

Between January and March 2017, SAR helicopters responded to 501 taskings, a 1% decrease from the same period in 2016. The Prestwick base was the busiest base with 72 taskings whilst the Stornoway base responded to the lowest number of taskings (23 taskings).

Taskings peaked in the warmer months (June to August 2016) followed by a gradual decline. The overall number of taskings more than halved in the later months of the year.



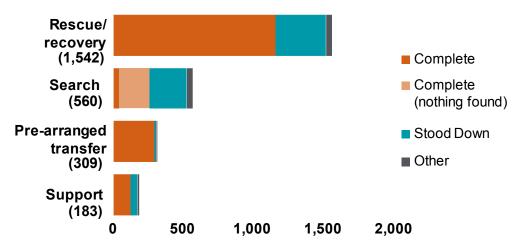
Chart 1: Civilian SARH taskings by base, year ending March 2017 SARH0101

Tasking categories

In the year ending March 2017, there were 1,542 rescue or recovery taskings, accounting for 59% of all taskings. The proportion of rescue or recovery taskings varied by base with Caernarfon carrying out 235 rescue or recovery taskings (68% of its total) and Lee-On-Solent carrying out 70 rescue or recovery taskings (34% of its total).

Pre-arranged transfers accounted for 12% of all taskings during the year ending March 2017. The greatest proportion of these taskings were carried out by the Newquay and Lee-On-Solent base (55%), where a number of transfers took place between the Channel Islands (Jersey, Guernsey), Isle of Wight and Isles of Scilly to mainland UK.

Chart 2: Number of taskings by tasking category and outcome, year ending March 2017 <u>SARH0102</u>



Note: The category "Other" consists of taskings which were aborted, false alarm/ hoax or retasked.

Tasking Outcome

SAR helicopter services completed around 70% of all taskings, including 8% of taskings being complete but nothing found. Stood down taskings accounted for just over a quarter of all taskings.

Of all rescue or recovery taskings, 75% were classed as complete, 23% of taskings were stood down and the remaining 2% consisted of taskings that were categorised as "other", which where aborted, false alarm/ hoax or retasked.

There were 560 search taskings taking place in the year ending March 2017. Taskings which were complete or complete but nothing found and stood down accounted for a similar proportion of search taskings (46% and 47% respectively). A further 7% were categorised as "other".

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 onscene assistance, prepositioning of SAR units for a potential incident and movement of equipment/personnel.

Tasking outcome

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.

Other

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.

Location of tasking, day of week and time of day

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.

Land based taskings accounted for nearly half (49%) of all taskings during the year ending March 2017.

The majority of pre-arranged transfers took place on land (66%). The majority of searches took place on land or in coastal locations, with only 8% of search taskings taking place more than 3 nautical miles out to sea.

In the year ending March 2017, taskings occurred more frequently during the weekend, Sunday being the busiest day of the week with 463 taskings and Saturday being the second busiest with 449 taskings.

Rescue or recovery taskings accounted for over a half of taskings during every day of the week. A higher proportion (around two thirds) of rescue or recoveries were accounted for on weekends.

In the year ending March 2017, nearly half (46%) of taskings started between 12pm and 5:59pm, the busiest time being between 3pm and 5:59pm accounting for nearly a quarter (24%) of all taskings that took place. The quietest three hour period was 3am to 5:59am accounting for 6% of all taskings.

Chart 3: Proportion of taskings by location type, year ending March 2017 <u>SARH0103</u>

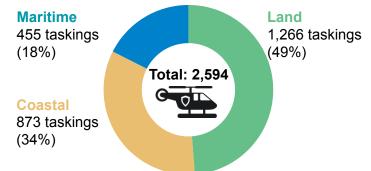
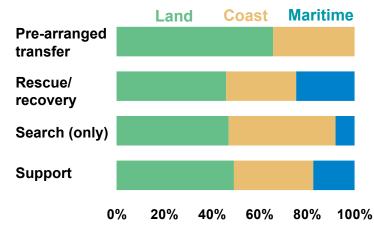
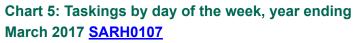
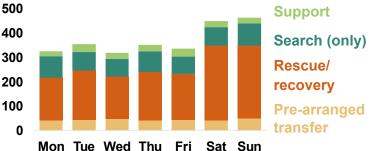
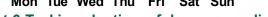


Chart 4: Proportion of taskings by category and location type, year ending March 2017 <u>SARH0105</u>

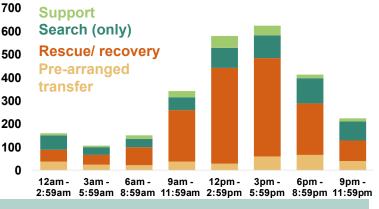


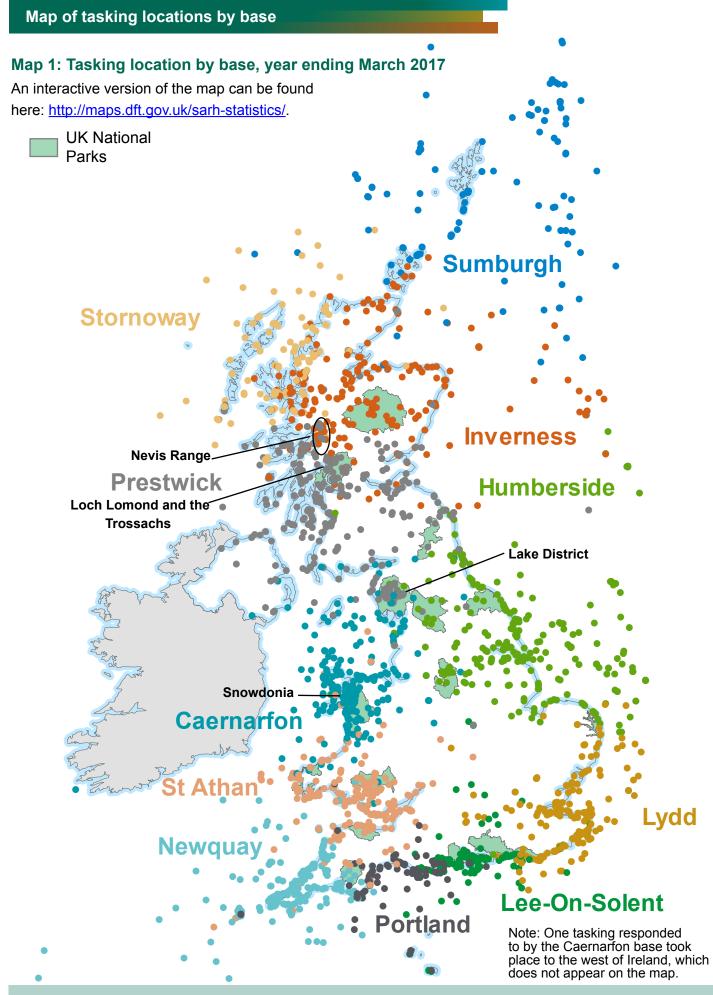






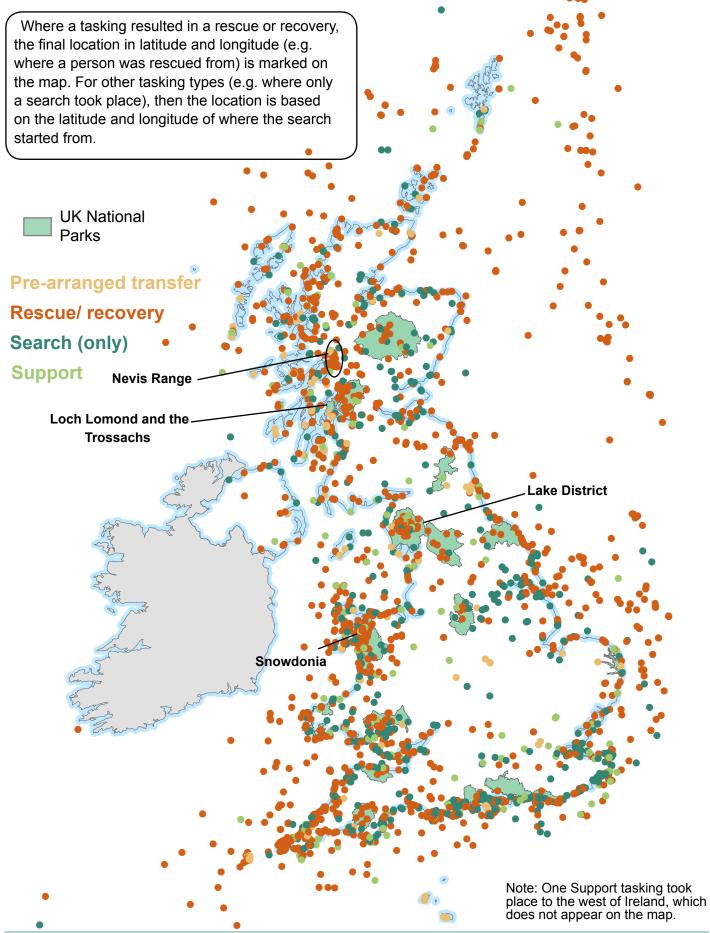






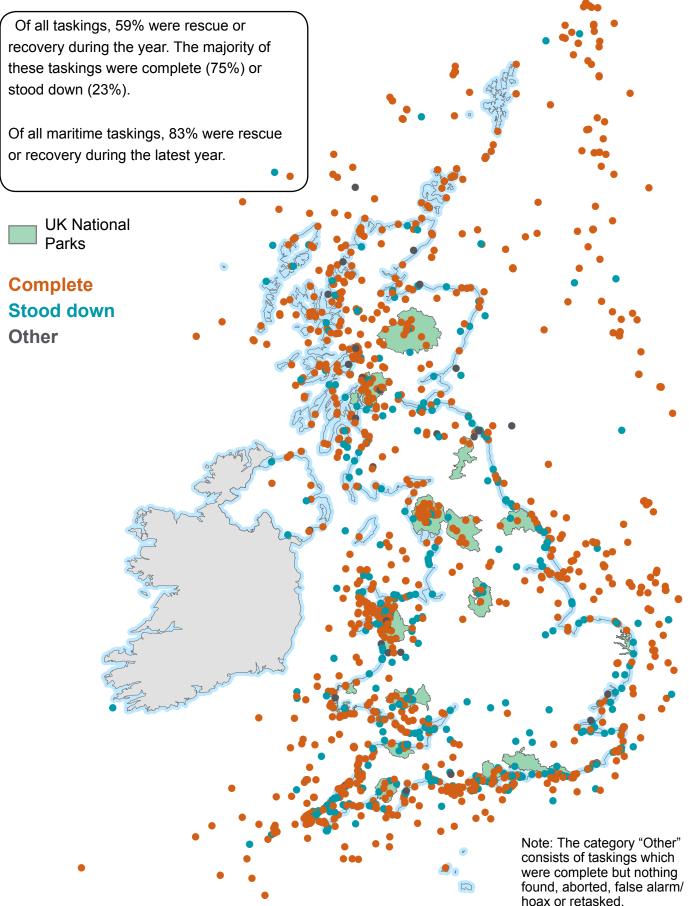
Map of tasking category

Map 2: Location of taskings by tasking category, year ending March 2017



Map of rescue or recovery taskings by outcome

Map 3: Rescue or recovery by outcome, year ending March 2017



Tasking by region

During the year ending March 2017, of the 2,594 civilian SARH taskings, 22% took place in the Highlands and Islands region of Scotland. More than half (57%) of the taskings in the Scotland region were land based and taskings in this region were dominated by rescues or recoveries.

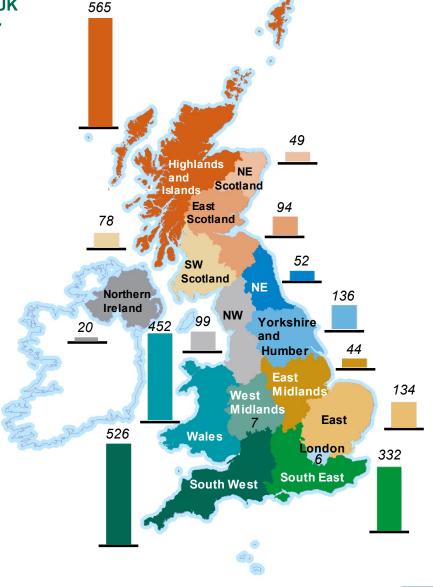
The South West England region was the second busiest in the UK, with 526 taskings during the year ending March 2017. More than half (57%) of taskings in this region took place on the coast. Wales was another busy area, with 452 taskings, of which 61% were land based - with many taking place in or near the Snowdonia national park.

Definition - Region

Taskings which took place in maritime and coastal locations have been classed to the nearest region. The breakdown was obtained by calculating the distance between the taskings and the outline of the UK regions using the longitude and latitude of the tasking location.

Only 6 taskings took place in London (mainly responded to by the Lydd base), in the year ending March 2017, with no taskings taking place during the latest quarter. Emergencies in London are more likely to be taken care of by other emergency services. The land-locked region of the West Midlands (which is covered mainly by the St Athan base) had only 7 tasking during the latest year.

Map 4: Number of taskings by UK region, year ending March 2017 <u>SARH0109</u>



Time spent on taskings

During the year ending March 2017, civilian SARH units spent 5,048 hours on taskings. Prestwick recorded the highest amount of total tasking time during the year, spending 792 hours across 342 taskings whilst Portland recorded the lowest amount of total tasking time, spending 186 hours on taskings, across 123 taskings (averaging around 1.5 hours per tasking).

Definition -

Length of tasking

Total number of flying hours over the period (including helicopter going back to base).

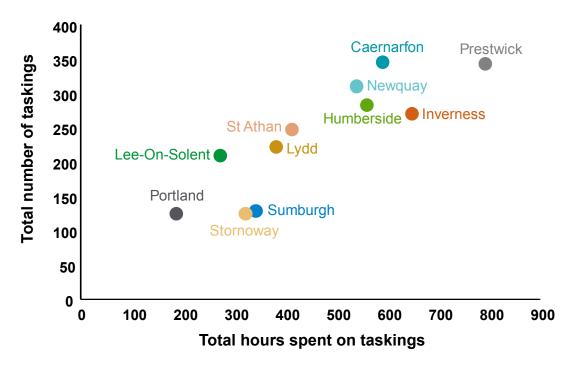
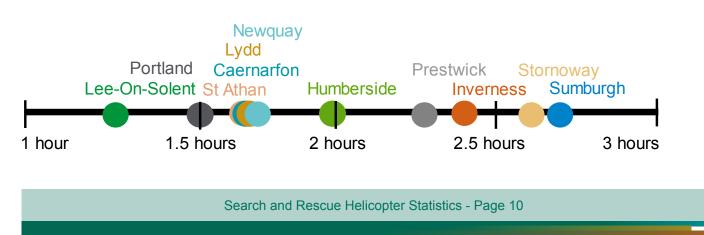


Chart 7: Total taskings and total time spent on taskings, year ending March 2017 SARH0106

Average duration time

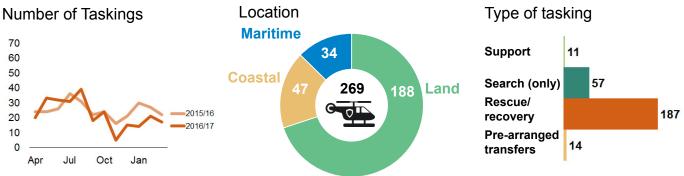
The total average time spent across all bases was 1.9 hours. Sumburgh and Stornoway had the highest averages, mainly due to their locations off the UK mainland. The average duration times for the St Athan, Caernarfon, Lydd and Newquay bases were similar (around 1.7 hours). These bases provide services to areas with a large amount of leisure activity.

Chart 8: Average duration time of taskings, year ending March 2017



Breakdown by base, year ending March 2017

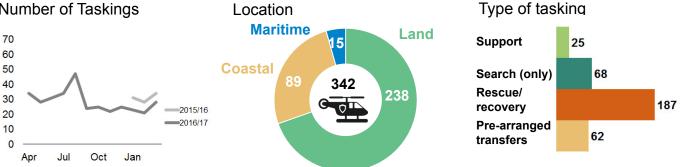
Inverness



- The Inverness base responded to 269 taskings during the year ending March 2017, an 11% decrease • from the previous year.
- Land based taskings accounted for 70% of all Inverness taskings the majority of Inverness taskings • took place in the Highlands and Islands region and the Cairngorms National Park.

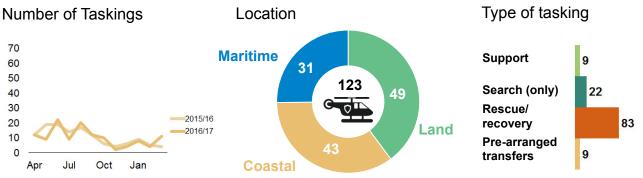
Prestwick

Number of Taskings

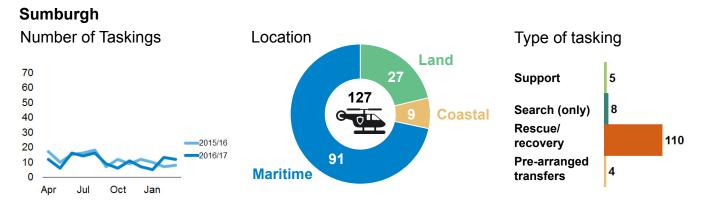


- The Prestwick base responded to 342 taskings during the year to end March 2017. During the latest quarter, the base responded to the highest number of taskings (72).
- The base carried out the highest number of land taskings, with many in or near Loch Lomond and the Trossachs National Park. More than half of taskings were rescue or recovery.

Stornoway

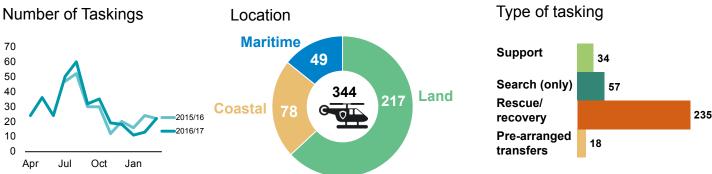


- Stornoway responded to 123 taskings during the year to end March 2017, being the least busy base in the Scotland region. Maritime taskings accounted for a quarter of all Stornoway taskings, 40% of taskings took place over land and a further 35% over coastal areas.
- Of all Stornoway's taskings, 67% were rescue or recovery.



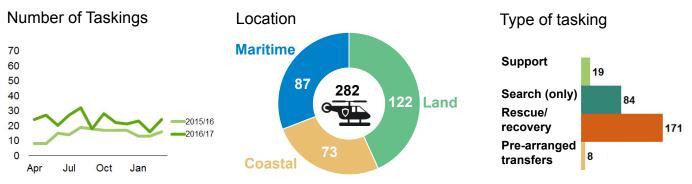
- The Sumburgh base responded to 127 taskings during the latest year, a 10% decrease from the year before. The latest quarter saw an increase of 20% compared to the same quarter in 2016.
- Of all Sumburgh taskings, 87% were rescue or recovery, with the majority taking place over maritime.
- The base responded to the most maritime taskings of any base accounting for 20% of all maritime taskings.

Caernarfon

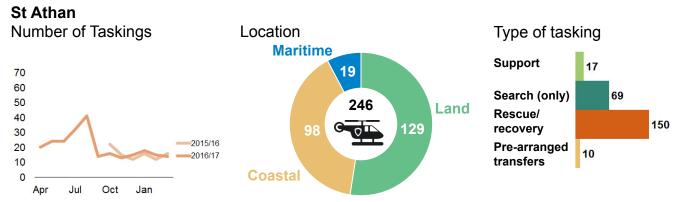


- The highest number of taskings were responded to by the Caernarfon base during the year to end March 2017 with 344 taskings. Taskings peaked in the summer of 2015 and 2016, where Caernarfon responded to 60 taskings in August 2016.
- Land based taskings accounted for 63% of all Caernarfon taskings. Most taskings taking place in or near the Snowdonia National Park were responded to by the Caernarfon base.
- The Caernarfon base responded to the most rescue or recovery taskings out of all eleven bases.

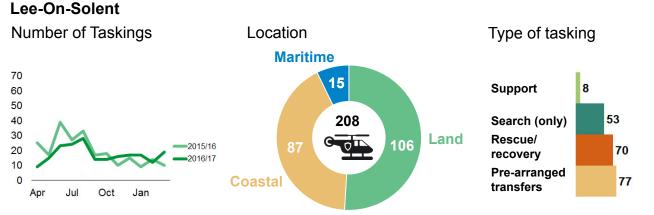
Humberside



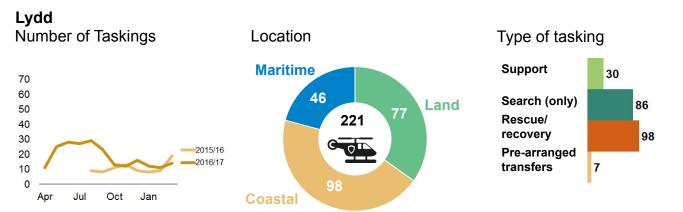
- Taskings responded to by the Humberside base increased by 61% in the year ending March 2017 compared to the previous year ending March 2016.
- Of all Humberside taskings, 43% were over land, 31% were over maritime and a further 26% were in coastal areas during the year to end March 2017.



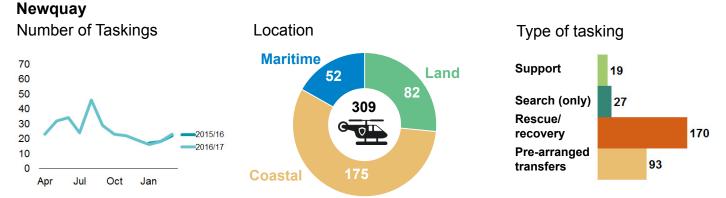
- The St Athan base responded to 246 taskings, with a peak number of 41 taskings in August 2016.
- In the year ending March 2017, land based taskings accounted for over half of all St Athan taskings (52%). A large number of taskings were in and around the Brecon Beacons National Park.
- There were 150 rescue or recovery taskings during the latest year with more than half of these (54%) being land based.



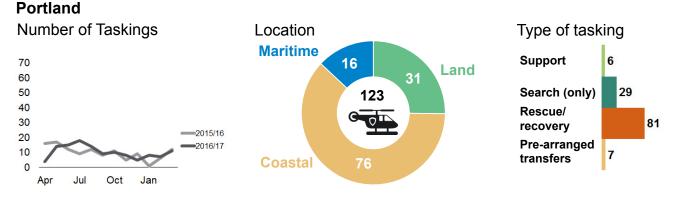
- The Lee-On-Solent base responded to 208 taskings during the year ending March 2017, an 11% decrease from the previous year.
- Land based taskings accounted for 51% of all Lee-On-Solent taskings.
- Compared to all bases, Lee-On-Solent carried out the highest proportion of pre-arranged transfers (37% of all Lee-On-Solent taskings). The majority of pre-arranged transfers took place between the Isle of Wight and Southampton or Portsmouth.



- The Lydd base responded to 221 taskings during the year ending March 2017, an average of 18 taskings per month. Similar to most bases, taskings peaked in August with 29 taskings.
- Similar to all the other southern England bases (with the exception of Lee-On-Solent), coastal taskings tend to dominate with 44% of all Lydd taskings taking place in coastal areas.
- In the year ending March 2017, the Lydd base carried out 86 search taskings, the highest number of search taskings of all eleven bases.



- The base responded to 309 taskings, being the busiest base in Southern England during the year ending March 2017.
- Newquay responded to the most coastal taskings (accounting for 20% of all coastal taskings) in the year to end March 2017.
- Of all Newquay taskings, 55% were rescue or recovery, and mainly took place in coastal areas and a further 30% of its taskings were pre-arranged transfers.



- Portland responded to 123 taskings during the year to end March 2017 and was one of the least busy bases, averaging around 10 taskings per month.
- Of all Portland taskings, 62% took place in coastal areas and a further quarter of taskings took place over land.

Users and User Feedback

As mentioned on page 2, we will be transitioning to a new data source in Summer 2017, with the next release covering SARH taskings in April to June 2017. A user guide is available explaining the proposed changes to the data source which can be found here: <u>https://www.gov.uk/government/statistics/search-and-rescue-helicopter-statistics-year-ending-march-2017</u>

We would be grateful for any <u>feedback</u> that users have on this publication as well as feedback on the proposed changes, so that we can consider how the release can better meet user needs and how the dissemination of information can be improved.

Within the Department for Transport and Maritime Coastguard Agency, the statistics are 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).

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).

The data collected is believed to be of high quality. It is consistently collected and regularly validated by DfT and MCA. However, some of the data items are not yet of sufficient quality to publish (such as the number of casualties rescued). Data are recorded for management information purposes and not directly for use in statistics. Therefore, this should be taken into account when interpreting the results. As mentioned earlier, the use of the co-ordination centre data (ARCC: who are responsible for the co-ordination of the search and rescue helicopters, from answering the initial request through to the conclusion of the tasking) will be used for future statistical publications.

Variables in the current data source include:

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. This is due to a lot of activity taking 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.

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 in time of when the helicopter rotors were turned on (start of the tasking) and then turned off (end of the tasking). The duration time analysis also includes taskings which have been stood down before lift-off. The number of stood down taskings are small, and the impact to the bases average duration time is minimal. 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.

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: <u>https://www.gov.uk/government/collections/</u> <u>military-search-and-rescue-quarterly-statistics-index</u>
- 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> release-access-lists-for-maritime-and-shipping-series
- 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>.