

**SYDNEY (KINGSFORD-SMITH) AIRPORT, AUSTRALIA
AERONAUTICAL INFORMATION PUBLICATION
AERODROME OBSTACLE CHART (DECEMBER 2021)
ICAO ANNEX 4 TYPE A (OPERATING LIMITATIONS)
(Runway 16L Takeoff)**

(ALL OBSTACLES PENETRATING THE 1.2% SURFACE)

The origin of the surface is located at the end of the clearway

The total length of the area is 10000 metres (5.4 NM)

The area is splayed at 12.5% (7° 08')

The surface has a gradient of 1.2%

Chainages commence from the start of the Take Off run available

Datum for bearings and co-ordinates is the Map Grid of Australia (MGA94)

Datum for heights (HT) is the Australian Height Datum (AHD)

NB: The published height relating to roads include a height between 2.5m and 4.6m for transient obstacles.

NB: The published height relating to railways include a 5.3m height for transient obstacles.

NB: Obstacle database used for reduction: Obst 220323.xlsm

| Mid-point of origin | | Runway Bearing (Deg Min Sec) | Height at Chainage 00 (m) (ft) | Runway Length (metres) | Chainage at Origin (metres) | Height at Origin | |
|---------------------|-------------|---------------------------------|--------------------------------------|------------------------------|-----------------------------------|---------------------|---------|
| Easting (MGA94) | Northing | | | | | (m) | (ft) |
| 333163.594 | 6239490.595 | 166° 47' 03" | 4.969 (16.302) | 2438.0 | 2528.0 | 3.999 | (13.12) |

EXPLANATION OF SPECIFIC TERMS

Chart No. Chart Identification Number, shown on the respective Type A Chart for the current year, denoting only the Significant Obstacles.

Note:

1. These numbers are regenerated with each survey and may vary from one year to the next.

2. The previous year's Chart No is also supplied for cross-referencing purposes.

Reference Number Surveyor Identification Number - A unique sequential number allocated during surveys to identify an obstacle. This number does not change.

Type of Obstacle ICAO Identification as displayed on Type A Chart and shown on that chart's legend.

Description General description of the respective obstacle.

| Chart No. (2021) | Chart No. (2020) | Reference Number (Surveyor ID No.) | Easting | Northing | Height of Obstacle above AHD | | Height of Lowest Surveyed Slope (1.2%) above AHD | Pen. of Lowest Surveyed Slope (1.2%) | Type of Obstacle | Chainage relative to RWY Start | Offset from Centreline | Gradient to top of Obstacle | Description | Date Last Visited | On Airport |
|------------------|------------------|------------------------------------|--------------|-----------|------------------------------|--------|--|--------------------------------------|------------------|--------------------------------|------------------------|-----------------------------|--|-------------------|------------|
| | | | | | metres | (feet) | | | | | | | | | |
| | | | MGA94 | | | | | | | | | | | | |
| 6 | 9 | 1001 | 333177.3 | 6239432.3 | 5.8 | 19.1 | 4.7 | 1.1 | ANTEN | 2588 | 0.0 West | 3.06% | Antenna | Mar 22 | Y |
| | | 1974 | 333176.7 | 6239320.0 | 6.6 | 21.7 | 6.0 | 0.6 | SPIRE | 2697 | 26.2 West | 1.54% | Western Obstacle light atop RWY 16L Localiser (lit) | Nov 21 | Y |
| | | 2050 | 333227.8 | 6239332.0 | 6.7 | 21.9 | 6.0 | 0.7 | SPIRE | 2697 | 26.2 East | 1.59% | Eastern Obstacle light atop RWY 16L Localiser (lit) | Nov 21 | Y |
| 10 | 14 | 2204 | 333268.5 | 6239361.6 | 7.6 | 25.0 | 5.8 | 1.8 | ANTEN | 2678 | 72.7 East | 2.42% | Aerial | Mar 22 | Y |
| | | 2706 | 333208.1 | 6239500.3 | 4.3 | 14.2 | 4.0 | 0.3 | SPIRE | 2529 | 45.6 East | 44.09% | ILS Protected Area Bollard | Nov 21 | Y |
| | | 2708 | 333214.4 | 6239473.6 | 4.4 | 14.4 | 4.3 | 0.0 | SPIRE | 2556 | 45.6 East | 1.33% | ILS Protected Area Bollard | Nov 21 | Y |
| 3 | 5 | 2714 | 333125.2 | 6239457.6 | 4.5 | 14.7 | 4.3 | 0.2 | SPIRE | 2551 | 44.9 West | 2.04% | ILS Protected Area Bollard | Mar 22 | Y |
| 1 | 1 | 2716 | 333120.1 | 6239480.2 | 4.4 | 14.4 | 4.0 | 0.4 | SPIRE | 2528 | 44.7 West | 208.48% | ILS Protected Area Bollard | Mar 22 | Y |
| | | 2718 | 333091.0 | 6239472.8 | 4.2 | 13.8 | 4.0 | 0.2 | SPIRE | 2529 | 74.7 West | 28.75% | ILS Protected Area Bollard | Nov 21 | Y |
| 2 | 2 | 4340 | 333179.1 | 6239477.3 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 12.0 East | 2.43% | 34R HIAL | Mar 22 | Y |
| | 4 | 4342 | 333167.4 | 6239474.5 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 0.0 East | 2.43% | 34R HIAL | Nov 21 | Y |
| | 3 | 4344 | 333155.7 | 6239471.8 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 12.0 West | 2.43% | 34R HIAL | Nov 21 | Y |
| 4 | 6 | 4346 | 333185.7 | 6239449.2 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 12.0 East | 1.93% | 34R HIAL | Mar 22 | Y |
| 5 | 7 | 4348 | 333174.0 | 6239446.4 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 0.0 West | 1.94% | 34R HIAL | Mar 22 | Y |
| | 8 | 4350 | 333162.3 | 6239443.6 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 12.0 West | 1.93% | 34R HIAL | Mar 22 | Y |
| | | 4352 | 333192.3 | 6239421.0 | 5.4 | 17.6 | 4.9 | 0.5 | SPIRE | 2602 | 12.0 East | 1.83% | 34R HIAL | Mar 22 | Y |
| | | 4354 | 333180.6 | 6239418.2 | 5.4 | 17.6 | 4.9 | 0.5 | SPIRE | 2602 | 0.0 East | 1.83% | 34R HIAL | Mar 22 | Y |
| | | 4356 | 333168.9 | 6239415.5 | 5.4 | 17.6 | 4.9 | 0.5 | SPIRE | 2602 | 12.0 West | 1.83% | 34R HIAL | Mar 22 | Y |
| 8 | 12 | 4358 | 333198.8 | 6239393.0 | 5.8 | 19.1 | 5.2 | 0.6 | SPIRE | 2631 | 12.0 East | 1.78% | 34R HIAL | Mar 22 | Y |
| | 10 | 4360 | 333187.2 | 6239390.3 | 5.8 | 19.1 | 5.2 | 0.6 | SPIRE | 2631 | 0.0 East | 1.78% | 34R HIAL | Nov 21 | Y |
| 7 | 11 | 4362 | 333175.5 | 6239387.5 | 5.8 | 19.1 | 5.2 | 0.6 | SPIRE | 2631 | 12.0 West | 1.78% | 34R HIAL | Mar 22 | Y |
| 9 | 13 | 4364 | 333205.4 | 6239364.9 | 6.3 | 20.8 | 5.6 | 0.7 | SPIRE | 2660 | 12.0 East | 1.77% | 34R HIAL | Mar 22 | Y |
| | | 4366 | 333193.8 | 6239362.2 | 6.3 | 20.8 | 5.6 | 0.7 | SPIRE | 2660 | 0.0 East | 1.77% | 34R HIAL | Mar 22 | Y |
| | | 4368 | 333182.1 | 6239359.4 | 6.3 | 20.8 | 5.6 | 0.7 | SPIRE | 2660 | 12.0 West | 1.77% | 34R HIAL | Mar 22 | Y |
| | | 4370 | 333215.0 | 6239337.3 | 6.8 | 22.4 | 5.9 | 0.9 | SPIRE | 2689 | 15.0 East | 1.75% | 34R HIAL | Mar 22 | Y |
| | | 4372 | 333200.3 | 6239334.3 | 7.1 | 23.2 | 5.9 | 1.1 | SPIRE | 2689 | 0.0 West | 1.91% | 34R HIAL | Mar 22 | Y |
| | | 4374 | 333185.8 | 6239330.5 | 6.8 | 22.3 | 5.9 | 0.9 | SPIRE | 2689 | 15.0 West | 1.75% | 34R HIAL | Mar 22 | Y |
| | | 4376 | 333205.2 | 6239313.5 | 7.4 | 24.1 | 6.2 | 1.2 | SPIRE | 2710 | 0.0 West | 1.84% | RWY 34R Localiser Far Field Centreline Monitor Antenna | Mar 22 | Y |
| | | 4378 | 333207.0 | 6239305.8 | 7.6 | 24.8 | 6.3 | 1.3 | SPIRE | 2718 | 0.0 East | 1.88% | Post | Mar 22 | Y |
| | | 4380 | 333147.0 | 6239299.8 | 6.9 | 22.5 | 6.2 | 0.7 | SPIRE | 2710 | 59.8 West | 1.57% | RWY 34R Localiser Far Field Displacement Sensitivity Monitor Antenna | Mar 22 | Y |
| | | 4738 | 333213.5 | 6239277.9 | 7.6 | 24.8 | 6.6 | 0.9 | SPIRE | 2746 | 0.1 West | 1.63% | 34R HIAL | Nov 21 | Y |

* Obstacle penetrates by < 0.05m.

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AERODROME OBSTACLE CHART (DECEMBER 2021)
ICAO ANNEX 4 TYPE A (OPERATING LIMITATIONS)
(Runway 16L Takeoff)**

(SIGNIFICANT OBSTACLES PENETRATING THE 1.2% SURFACE SHOWN ON TYPE A CHART)

The origin of the surface is located at the end of the clearway

The total length of the area is 10000 metres (5.4 NM)

The area is splayed at 12.5% (7° 08')

The surface has a gradient of 1.2%

Chainages commence from the start of the Take Off run available

Datum for bearings and co-ordinates is the Map Grid of Australia (MGA94)

Datum for heights (HT) is the Australian Height Datum (AHD)

NB: The published height relating to roads include a height between 2.5m and 4.6m for transient obstacles.

NB: The published height relating to railways include a 5.3m height for transient obstacles.

NB: Obstacle database used for reduction: Obst 220323.xlsm

| Mid-point of origin | | Runway Bearing | Height at Chainage 00 | Runway Length | Chainage at Origin | Height at Origin | |
|---------------------|-------------|----------------|-----------------------|---------------|--------------------|------------------|---------|
| Easting | Northing | | | | | (m) | (ft) |
| (MGA94) | | (Deg Min Sec) | (m) (ft) | (metres) | (metres) | (m) | (ft) |
| 333163.594 | 6239490.595 | 166° 47' 03" | 4.969 (16.302) | 2438.0 | 2528.0 | 3.999 | (13.12) |

EXPLANATION OF SPECIFIC TERMS

| | |
|-------------------------|--|
| Chart No. | Chart Identification Number, shown on the respective Type A Chart for the current year, denoting only the Significant Obstacles. <u>Note:</u> 1. These numbers are regenerated with each survey and may vary from one year to the next. 2. The previous year's Chart No is also supplied for cross-referencing purposes. |
| Reference Number | Surveyor Identification Number - A unique sequential number allocated during surveys to identify an obstacle. This number does not change. |
| Type of Obstacle | ICAO Identification as displayed on Type A Chart and shown on that chart's legend. |
| Description | General description of the respective obstacle. |

| Chart No. (2021) | Chart No. (2020) | Reference Number (Surveyor ID No.) | Easting | Northing | Height of Obstacle above AHD | | Height of Lowest Surveyed Slope (1.2%) above AHD | Pen. of Lowest Surveyed Slope (1.2%) | Type of Obstacle | Chainage relative to RWY Start | Offset from Centreline | Gradient to top of Obstacle | Description | Date Last Visited | On Airport |
|------------------|------------------|------------------------------------|----------|-----------|------------------------------|---------------|--|--------------------------------------|------------------|--------------------------------|------------------------|-----------------------------|----------------------------|-------------------|------------|
| | | | | | MGA94 | metres (feet) | | | | | | | | | |
| 1 | 1 | 2716 | 333120.1 | 6239480.2 | 4.4 | 14.4 | 4.0 | 0.4 | SPIRE | 2528 | 0.0 West | 208.48% | ILS Protected Area Bollard | Mar 22 | Y |
| 2 | 2 | 4340 | 333179.1 | 6239477.3 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 26.2 West | 2.43% | 34R HIAL | Mar 22 | Y |
| 3 | 5 | 2714 | 333125.2 | 6239457.6 | 4.5 | 14.7 | 4.3 | 0.2 | SPIRE | 2551 | 26.2 East | 2.04% | ILS Protected Area Bollard | Mar 22 | Y |
| 4 | 6 | 4346 | 333185.7 | 6239449.2 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 72.7 East | 1.93% | 34R HIAL | Mar 22 | Y |
| 5 | 7 | 4348 | 333174.0 | 6239446.4 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 45.6 East | 1.94% | 34R HIAL | Mar 22 | Y |
| 6 | 9 | 1001 | 333177.3 | 6239432.3 | 5.8 | 19.1 | 4.7 | 1.1 | ANTEN | 2588 | 45.6 East | 3.06% | Antenna | Mar 22 | Y |
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| 8 | 12 | 4358 | 333198.8 | 6239393.0 | 5.8 | 19.1 | 5.2 | 0.6 | SPIRE | 2631 | 44.7 West | 1.78% | 34R HIAL | Mar 22 | Y |
| 9 | 13 | 4364 | 333205.4 | 6239364.9 | 6.3 | 20.8 | 5.6 | 0.7 | SPIRE | 2660 | 74.7 West | 1.77% | 34R HIAL | Mar 22 | Y |
| 10 | 14 | 2204 | 333268.5 | 6239361.6 | 7.6 | 25.0 | 5.8 | 1.8 | ANTEN | 2678 | 12.0 East | 2.42% | Aerial | Mar 22 | Y |

* Obstacle penetrates by < 0.05m.

**SYDNEY (KINGSFORD-SMITH) AIRPORT, AUSTRALIA
AERONAUTICAL INFORMATION PUBLICATION
AERODROME OBSTACLE CHART (DECEMBER 2021)
ICAO ANNEX 4 TYPE A (OPERATING LIMITATIONS)
(Runway 16L Takeoff)**

(NEW AND DELETED OBSTACLES)

The origin of the surface is located at the end of the clearway

The total length of the area is 10000 metres (5.4 NM)

The area is splayed at 12.5% (7° 08')

The surface has a gradient of 1.2%

Chainages commence from the start of the Take Off run available

Datum for bearings and co-ordinates is the Map Grid of Australia (MGA94)

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| Mid-point of origin | | Runway Bearing | Height at Chainage 00 | Runway Length | Chainage at Origin | Height at Origin | |
|---------------------|-------------|----------------|-----------------------|---------------|--------------------|------------------|---------|
| Easting | Northing | | | | | (m) | (ft) |
| (MGA94) | | (Deg Min Sec) | (m) (ft) | (metres) | (metres) | (m) | (ft) |
| 333163.594 | 6239490.595 | 166° 47' 03" | 4.969 (16.302) | 2438.0 | 2528.0 | 3.999 | (13.12) |

EXPLANATION OF SPECIFIC TERMS

Chart No.

Chart Identification Number, shown on the respective Type A Chart for the current year, denoting only the Significant Obstacles.

Note:

1. These numbers are regenerated with each survey and may vary from one year to the next.
2. The previous year's Chart No is also supplied for cross-referencing purposes.

Reference Number

Surveyor Identification Number - A unique sequential number allocated during surveys to identify an obstacle. This number does not change.

Type of Obstacle

ICAO Identification as displayed on Type A Chart and shown on that chart's legend.

Description

General description of the respective obstacle.

New Obstacles
(Obstacles newly reflected on Type A Charts - 2021 Survey)

| Chart No. (2021) | Chart No. (2020) | Reference Number (Surveyor ID No.) | Easting | Northing | Height of Obstacle above AHD | | Height of Lowest Surveyed Slope (1.2%) above AHD | Pen. of Lowest Surveyed Slope (1.2%) | Type of Obstacle | Chainage relative to RWY Start | Offset from Centreline | Gradient to top of Obstacle | Description |
|------------------|------------------|------------------------------------|---------|----------|------------------------------|--------|--|--------------------------------------|------------------|--------------------------------|------------------------|-----------------------------|-------------|
| | | | | | metres | (feet) | | | | | | | |
| | | | MGA94 | | | | | | | | | | |
| | | | | | | | | | | | | | |

Note: A 'New' Obstacle is an obstacle that has become prominent from the results of the current survey. It is now reflected on the Type A Chart.

It is possible that this obstacle existed prior to this survey but was not prominent at that time (eg: shielded by other obstacles, etc).

* Obstacle penetrates <0.05m.

Deleted Obstacles
(Obstacles removed from Type A Charts - 2020 Survey)

| Chart No. (2021) | Chart No. (2020) | Reference Number (Surveyor ID No.) | Easting | Northing | Height of Obstacle above AHD | | Height of Lowest Surveyed Slope (1.2%) above AHD | Pen. of Lowest Surveyed Slope (1.2%) | Type of Obstacle | Chainage relative to RWY Start | Offset from Centreline | Gradient to top of Obstacle | Description |
|------------------|------------------|------------------------------------|----------|-----------|------------------------------|--------|--|--------------------------------------|------------------|--------------------------------|------------------------|-----------------------------|-------------|
| | | | | | metres | (feet) | | | | | | | |
| | | | MGA94 | | | | | | | | | | |
| | 4 | 4342 | 333167.4 | 6239474.5 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 0 West | 2.43% | HIAL |
| | 3 | 4344 | 333155.7 | 6239471.8 | 4.4 | 14.4 | 4.2 | 0.2 | SPIRE | 2545 | 12 West | 2.43% | HIAL |
| | 8 | 4350 | 333162.3 | 6239443.6 | 4.9 | 16.0 | 4.5 | 0.3 | SPIRE | 2573 | 12 West | 1.93% | HIAL |
| | 10 | 4360 | 333187.2 | 6239390.3 | 5.8 | 19.1 | 5.2 | 0.6 | SPIRE | 2631 | 0 West | 1.78% | HIAL |

Note: A 'Deleted' Obstacle is an obstacle no longer prominent from the results of the current survey. It has been removed from the Type A Chart.

It is possible that this obstacle still physically exists however it is no longer prominent (eg: shielded by other obstacles, etc).

* Obstacle penetrates <0.05m.