NGS FORM-292

# AERONAUTICAL DATA SHEET
# NATIONAL GEODETIC SURVEY

DATE GENERATED: 02/27/2004

PROJECT NUMBER: 432
ARPT IDENTIFIER: TUL — SITE NUMBER: 19283.A
ARPT NAME: TULSA INTERNATIONAL AIRPORT — SURVEY DATE: 04/30/2003
CITY: TULSA — HORIZONTAL DATUM: NAD83
STATE: OKLAHOMA — VERTICAL DATUM: NAVD88
ARPT ELEVATION: 677.4 — DISTANCE FROM RWY END: 36L+67 — ATCT FLOOR ELEV: 779.0
AIRPORT REFERENCE POINT — LATITUDE: 361154.2 — LONGITUDE: -955317.2 — DECLINATION: 4.4E

## RUNWAY INFORMATION

RUNWAY: 8/26 LENGTH: 7376 WIDTH: 150 SURFACE TYPE: SPECIALLY PREPARED HARD SURFACE - PAVED

| RUNWAY END DATA | | | | | | DISPLACED THRESHOLD DATA | | | |
|---|---|---|---|---|---|---|---|---|---|
| RWY | GEODETIC LATITUDE | GEODETIC LONGITUDE | ELEV | AZ (N) | TDZE | LENGTH | LATITUDE | LONGITUDE | ELEV |
| 8 | 361143.5539 | -955356.5093 | 671.2 | 892517 | 671.2 | | | | |
| 26 | 361144.2809 | -955226.5333 | 633.0 | 2692610 | 651.4 | | | | |

## PROFILE DATA

DISTANCES FROM APPROACH END 8

| DISTANCE | ELEV |
|---|---|
| 0 | 671.2 |
| 1233 | 655.7 |
| 1982 | 650.2 |
| 2703 | 648.9 |
| 4253 | 651.7 |
| 4868 | 649.3 |
| 6899 | 635.1 |
| 7376 | 633.0 |

DISTANCES FROM APPROACH END 26

| DISTANCE | ELEV |
|---|---|
| 0 | 633.0 |
| 476 | 635.1 |
| 2507 | 649.3 |
| 3123 | 651.7 |
| 4673 | 648.9 |
| 5393 | 650.2 |
| 6143 | 655.7 |
| 7376 | 671.2 |

RUNWAY: 18L/36R LENGTH: 9999 WIDTH: 200 SURFACE TYPE: SPECIALLY PREPARED HARD SURFACE - PAVED

RUNWAY END DATA — DISPLACED THRESHOLD DATA

| RWY | GEODETIC LATITUDE | GEODETIC LONGITUDE | ELEV | AZ (N) | TDZE | LENGTH | LATITUDE | LONGITUDE | ELEV |
|---|---|---|---|---|---|---|---|---|---|
| 18L | 361250.1647 | -955252.7227 | 626.4 | 1830505 | 641.2 | | | | |
| 36R | 361111.4305 | -955259.2863 | 643.7 | 30501 | 649.8 | | | | |

PROFILE DATA

DISTANCES FROM APPROACH END 36R

| DISTANCE | ELEV |
|---|---|
| 0 | 643.7 |
| 1157 | 649.2 |
| 3302 | 649.3 |
| 4981 | 648.2 |
| 6721 | 642.6 |
| 9999 | 626.4 |

DISTANCES FROM APPROACH END 18L

| DISTANCE | ELEV |
|---|---|
| 0 | 626.4 |
| 3278 | 642.6 |
| 5019 | 648.2 |
| 6697 | 649.3 |
| 8843 | 649.2 |
| 9999 | 643.7 |

RUNWAY: 18R/36L LENGTH: 6101 WIDTH: 150 SURFACE TYPE: SPECIALLY PREPARED HARD SURFACE - PAVED

RUNWAY END DATA — DISPLACED THRESHOLD DATA

| RWY | GEODETIC LATITUDE | GEODETIC LONGITUDE | ELEV | AZ (N) | TDZE | LENGTH | LATITUDE | LONGITUDE | ELEV |
|---|---|---|---|---|---|---|---|---|---|
| 18R | 361225.9951 | -955356.7296 | 634.4 | 1830506 | 667.3 | | | | |
| 36L | 361125.7549 | -955400.7347 | 677.2 | 30503 | 677.4 | | | | |

PROFILE DATA

DISTANCES FROM APPROACH END 36L

| DISTANCE | ELEV |
|---|---|
| 0 | 677.2 |
| 67 | 677.4 |
| 3735 | 664.8 |
| 4830 | 653.4 |
| 6101 | 634.4 |

DISTANCES FROM APPROACH END 18R

| DISTANCE | ELEV |
|---|---|
| 0 | 634.4 |
| 1271 | 653.4 |
| 2366 | 664.8 |
| 6034 | 677.4 |
| 6101 | 677.2 |

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SURVEY DATE: 04/30/2003
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

NAVIGATIONAL AID INFORMATION

| ELECTRONIC | | LATITUDE | LONGITUDE | ELEV | OFFSET DISTANCE | ALONG CNTRLN DISTANCE |
|---|---|---|---|---|---|---|
| ASR | (TUL) | 361245.5355 | -955505.9725 | 641.1 | | |
| DME | (36R) | 361300.6719 | -955256.9790 | 620.5 | | |
| GS | (18L) | 361239.5273 | -955248.5445 | 621.0 | | |
| GS | (18L) PP | 361239.7400 | -955253.4158 | 631.6 | 400L | 1056 |
| GS | (18R) | 361216.8814 | -955400.8656 | 643.3 | | |
| GS | (18R) PP | 361216.7277 | -955357.3458 | 648.8 | 289R | 939 |
| GS | (36R) | 361120.6320 | -955303.5572 | 646.1 | | |
| GS | (36R) PP | 361120.4194 | -955258.6888 | 648.5 | 400L | 910 |
| IM | (36R) | 361101.0259 | -955259.9849 | | | 1054 |
| LOC | (18L) | 361101.2687 | -955259.9634 | 635.2 | | 1029 |
| LOC | (18R) | 361119.3827 | -955401.1664 | 673.4 | | 645 |
| LOC | (36R) | 361300.5835 | -955252.0345 | 624.3 | | 1055 |
| LOM | (18L) | 361826.1496 | -955231.1322 | | | 34024 |
| LOM | (36R) | 360550.6105 | -955319.5672 | | | 32486 |
| MM | (18R) | 361259.5436 | -955354.4876 | | | 3398 |
| MM | (36R) | 361038.4418 | -955301.7543 | | | 3342 |
| OM | (18R) | 361826.3488 | -955342.5738 | | | 36461 |
| VORTAC | (TUL) | 361146.5437 | -954717.1941 | 770.4 | | |

| VISUAL | | LATITUDE | LONGITUDE |
|---|---|---|---|
| ALS | (18L) | | |
| ALS | (36R) | | |
| APBN | | 361158.9111 | -955314.6521 |
| PAPI | (8) | | |
| PAPI | (18L) | | |
| PAPI | (18R) | | |
| PAPI | (26) | | |
| PAPI | (36L) | | |
| PAPI | (36R) | | |
| REIL | (8) | | |

| VISUAL | LATITUDE | LONGITUDE |
|---|---|---|
| REIL (18R) | | |
| REIL (26) | | |
| REIL (36L) | | |

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VERTICAL DATUM: NAVD88

OBSTRUCTION INFORMATION

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8 C

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OL ON HGR | 361145.25 | -955414.04 | 1A | 690 | | 19 | 19 | 13 | 1435 | | 186L | -18 |
| HGR | 361139.62 | -955414.30 | 1A | 698 | | 27 | 27 | 21 | 1462 | | 383R | -11 |
| OL ON HGR | 361148.15 | -955414.55 | 1A | 703 | | 32 | 32 | 26 | 1474 | | *479L | -6 |
| TREE | 361139.20 | -955415.29 | 1A | 713 | | 42 | 42 | 36 | 1544 | | 424R | 2 |

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26 C

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TREE | 361148.82 | -955209.04 | 1A | 664 | | 31 | 13 | -13 | 1438 | | *445R | -5 |
| POLE | 361139.80 | -955208.73 | 1A | 666 | | 33 | 15 | -11 | 1455 | | *468L | -4 |
| POLE | 361145.31 | -955207.03 | 1A | 661 | | 28 | 10 | -16 | 1600 | | 89R | -13 |
| TREE | 361146.97 | -955203.52 | 1A | 671 | | 38 | 20 | -6 | 1889 | | 253R | -12 |

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18L PIR

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROD ON OL GS | 361120.63 | -955303.56 | 1A | 689 | | 63 | 48 | 12 | -9089 | | 400R | 41 |
| ROD ON OL GS | 361239.53 | -955248.54 | 1A | 671 | | 45 | 30 | -6 | -1056 | | 400L | 40 |
| ANT ON BLDG AT DME | 361300.67 | -955256.98 | 1A | 632 | | 6 | -9 | -45 | 1042 | | 405R | -11 |
| LOC | 361300.58 | -955252.03 | 1A | 632 | | 6 | -9 | -45 | 1055 | | 0R | -12 |
| TREE | 361307.09 | -955300.79 | 1A | 662 | | 36 | 21 | -15 | 1673 | | *752R | 6 |
| TREE | 361307.86 | -955258.69 | 1A | 660 | | 34 | 19 | -17 | 1760 | | 584R | 2 |
| TREE | 361309.12 | -955257.21 | 1A | 667 | | 41 | 26 | -10 | 1894 | | 471R | 7 |
| TREE | 361325.32 | -955245.32 | 1A | 690 | | 64 | 49 | 13 | 3583 | | 415L | -4 |

36R PIR

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROD ON OL GS | 361239.53 | -955248.54 | 1A | 671 | | 27 | 21 | -6 | -8944 | | 400R | 40 |
| ROD ON OL GS | 361120.63 | -955303.56 | 1A | 689 | | 45 | 39 | 12 | -910 | | 400L | 41 |
| ANT ON BLDG | 361101.59 | -955304.81 | 1A | 661 | | 17 | 11 | -16 | 1018 | | 398L | 1 |
| LT POLE | 361100.54 | -955253.46 | 1A | 660 | | 16 | 10 | -17 | 1074 | | 536R | -1 |
| TREE | 361057.44 | -955259.66 | 1A | 662 | | 18 | 12 | -15 | 1414 | | 46R | -6 |
| TREE | 361055.63 | -955258.78 | 1A | 673 | | 29 | 23 | -4 | 1593 | | 127R | 2 |

18R PIR

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RD(N) | 361125.98 | -955405.95 | 1A | 686 | | 52 | 19 | 9 | -6101 | | 428R | 9 |
| ANT ON OL GS | 361216.88 | -955400.87 | 1A | 666 | | 32 | -1 | -11 | -939 | | 289R | 18 |
| TREE | 361231.94 | -955401.70 | 1A | 648 | | 14 | -19 | -29 | 578 | | 439R | 6 |
| TREE | 361232.43 | -955354.36 | 1A | 653 | | 19 | -14 | -24 | 661 | | 159L | 9 |
| TREE | 361232.85 | -955348.84 | 1A | 659 | | 25 | -8 | -18 | 727 | | *609L | 14 |
| TREE | 361234.64 | -955403.44 | 1A | 661 | | 27 | -6 | -16 | 843 | | *597R | 13 |
| TREE | 361238.04 | -955355.97 | 1A | 661 | | 27 | -6 | -16 | 1219 | | 3R | 6 |
| TREE | 361239.55 | -955358.54 | 1A | 662 | | 28 | -5 | -15 | 1361 | | 222R | 5 |
| TREE | 361243.56 | -955346.67 | 1A | 680 | | 46 | 13 | 3 | 1818 | | 727L | 13 |
| TREE | 361246.41 | -955400.88 | 1A | 672 | | 38 | 5 | -5 | 2044 | | 451R | 1 |
| TREE | 361250.56 | -955404.33 | 1A | 679 | | 45 | 12 | 2 | 2447 | | 756R | 0 |

36L C

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL | HAR | HAT | HAA | DEND | DTHR | DCLN | PNTR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANT ON OL GS | 361216.88 | -955400.87 | 1A | 666 | | -11 | -11 | -11 | -5162 | | 289L | 18 |
| RD(N) | 361125.98 | -955405.95 | 1A | 686 | | 9 | 9 | 9 | 0 | | 428L | 9 |
| RD(N) | 361124.00 | -955405.97 | 1A | 687 | | 10 | 10 | 10 | 200 | | 419L | 10 |
| ANT ON BLDG | 361120.09 | -955355.65 | 1A | 692 | | 15 | 15 | 15 | 550 | | 447R | 5 |
| TREE | 361113.37 | -955402.31 | 1A | 706 | | 29 | 29 | 29 | 1257 | | 62L | -2 |
| TREE | 361106.34 | -955401.91 | 1A | 721 | | 44 | 44 | 44 | 1965 | | 9R | -8 |

ARP HCT

| OBJECT | LATITUDE | LONGITUDE | A | ELEV | AGL HAA | MAG BEARING | DISTANCE | PNTR |
|---|---|---|---|---|---|---|---|---|
| ANT + APBN ON OL ATCT | 361158.91 | -955314.65 | 1A | 809 | 132 | 1916 | 520 | 16 |
| ROD ON OL AMOM | 361152.95 | -955305.12 | 1A | 689 | 12 | 9252 | 998 | 12 |
| OL RTR ANT | 361206.84 | -955305.10 | 1A | 701 | 24 | 3324 | 1618 | 15 |
| ANT ON OL TWR | 361157.29 | -955246.73 | 1A | 677 | 0 | 7828 | 2517 | -11 |
| ROD ON OL WDI | 361154.84 | -955241.71 | 1A | 675 | -2 | 8418 | 2910 | -74 |
| LT POLE | 361139.25 | -955240.39 | 1A | 678 | 1 | 11212 | 3375 | 3 |
| TREE | 361128.20 | -955350.03 | 1A | 717 | 40 | 22116 | 3763 | -12 |
| POLE | 361126.86 | -955352.82 | 1A | 697 | 20 | 22209 | 4021 | 0 |
| TREE | 361125.54 | -955351.93 | 1A | 716 | 39 | 22005 | 4063 | 7 |
| ANT ON OL HGR | 361136.08 | -955409.24 | 1A | 708 | 31 | 24221 | 4643 | -2 |
| OL ON HGR | 361216.58 | -955407.19 | 1A | 714 | 37 | 29431 | 4681 | 21 |
| TREE | 361232.85 | -955348.84 | 1A | 659 | -18 | 32202 | 4690 | 10 |
| OL ON HGR | 361148.15 | -955414.55 | 1A | 703 | 26 | 25811 | 4741 | -11 |
| LT POLE | 361112.56 | -955247.29 | 1A | 710 | 33 | 14523 | 4873 | -3 |
| OL ON TWR | 361113.07 | -955244.90 | 1A | 722 | 45 | 14307 | 4931 | -18 |
| OL ON HGR | 361137.85 | -955414.21 | 1A | 702 | 25 | 24607 | 4957 | -23 |
| LT ON BLDG | 361136.93 | -955220.15 | 1A | 706 | 29 | 10604 | 4992 | -1 |
| TREE | 361127.20 | -955408.46 | 1A | 701 | 24 | 23235 | 5011 | 4 |
| OL BLDG | 361101.96 | -955313.10 | 1A | 717 | 40 | 17157 | 5294 | -8 |
| OL ON BLDG | 361122.30 | -955408.43 | 1A | 699 | 22 | 22804 | 5296 | 4 |
| TREE | 361231.59 | -955404.65 | 1A | 664 | -13 | 30947 | 5424 | 4 |
| TREE | 361234.64 | -955403.44 | 1A | 661 | -16 | 31246 | 5576 | 13 |
| TREE | 361148.82 | -955209.04 | 1A | 664 | -13 | 9109 | 5613 | -7 |
| WSK ON OL BLDG | 361104.11 | -955247.39 | 1A | 717 | 40 | 14950 | 5624 | 0 |
| TREE | 361234.49 | -955404.62 | 1A | 672 | -5 | 31157 | 5631 | 11 |
| POLE | 361139.80 | -955208.73 | 1A | 666 | -11 | 10008 | 5799 | -8 |
| TREE | 361307.09 | -955300.79 | 1A | 662 | -15 | 556 | 7493 | 2 |

ADDITIONAL INFORMATION:

AERONAUTICAL DATA IS AVAILABLE ON THE INTERNET AT HTTP://WWW.NGS.NOAA.GOV.

ADDITIONAL INFORMATION ON DATA STANDARDS CAN BE FOUND IN FAA NO. 405, "STANDARDS FOR AERONAUTICAL SURVEYS AND RELATED PRODUCTS".

AN ASTERISK "*" INDICATES THAT THIS OBJECT IS OUTSIDE, BUT WITHIN 50 FEET, OF THE OBSTRUCTION IDENTIFICATION SURFACE.