# FEDERAL AVIATION ADMINISTRATION

# OBSTRUCTION DATA FOR ARRIVAL/DEPARTURE OF AIRCRAFT

MALCOLM MCKINNON AIRPORT

BRUNSWICK, GEORGIA

ODS 168

1st EDITION

OC 168
SURVEYED MARCH 1984
10th EDITION

PREPARED AND DISTRIBUTED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

# OBSTRUCTION DATA SHEET

A new computer generated data run, called the Obstruction Data Sheet (ODS), has been developed to permit dissemination of airport obstruction survey data in a more timely manner following completion of surveys at airports. The ODS will be published as soon as possible after the survey and prior to the printing and distribution of the Airport Obstruction Chart. Thus, we expect that important survey data will be made available to users 3 or 4 months prior to the publication of the Airport Obstruction Chart.

The ODS will carry the same name and number as the corresponding Airport Obstruction Chart and will be made available to users on a one copy ODS for one copy Airport Obstruction Chart basis.

We plan to evaluate the ODS concept and format after users have gained some experience with the product.

# FEDERAL AVIATION ADMINISTRATION

## OBSTRUCTION DATA FOR ARRIVAL/DEPARTURE OF AIRCRAFT

THE ENCLOSED OBSTRUCTION INFORMATION IS THE RESULT OF THE FIELD SURVEY PERFORMED BY THE NATIONAL OCEAN SERVICE (NOS) FOR THE FEDERAL AVIATION ADMINISTRATION (FAA) IN ACCORDANCE WITH FAA FEDERAL AIR REGULATIONS (FAR) PART 77. THESE DATA ARE FURNISHED IN ADVANCE OF THE PUBLISHED AIRPORT OBSTRUCTION CHART (OC) OF THE CORRESPONDING AIRPORT.

THIS REPORT LISTS THE OBSTRUCTIONS EXISTING AT THE TIME OF THE SURVEY.

A DIAGRAM SHOWING RUNWAY ORIENTATION AND RELATED RUNWAY DATA IS INCLUDED.

OBSTRUCTION DATA IS LISTED WITH REFERENCE TO THE ARP OR THE RUNWAY END.

OBSTRUCTIONS IN THE PRIMARY, APPROACH/DEPARTURE SURFACES ARE REFERENCED TO THE APPROPRIATE PHYSICAL CENTERLINE END OF THE RUNWAY.

OBSTRUCTIONS IN THE TRANSITIONAL, HORIZONTAL AND CONICAL SURFACES ARE REFERENCED TO THE AIRPORT REFERENCE POINT (ARP).

POSITIONS AND ELEVATIONS HAVE BEEN TIED TO THE NATIONAL NETWORK OF GEODETIC CONTROL.

| RUNWAY | SURVEYING CRITERIA. |
|---|---|
| PIR | Precision Instrument Runway. 50:1 Slope first 10,000 FT |
| | 40:1 for the next 40,000 FT |
| D | Nonprecision Instrument Runway with visibility minimums as low as ¾ mile. |
| | 34:1 Slope |
| C | Nonprecision Instrument Runway with visibility minimums greater than |
| | ¾ mile. 34:1 Slope |
| B(V) | Visual runway with visual approach only. 20:1 Slope |
| A(NP) | Utility runway with nonprecision instrument approach. 20:1 Slope |
| A(V) | Utility runway with visual approach only. 20:1 Slope |

# ANNOTATION OF SAMPLE OBSTRUCTION DATA

THE DISTANCES AND MAGNETIC BEARINGS COMPUTED FOR THE OBSTRUCTIONS THAT FOLLOW ARE REFERENCED TO THIS POINT

FAA PART 77 APPROACH CATEGORY FOR WHICH OBSTRUCTION SURVEY WAS PERFORMED

MEASURED FROM SOUTH

PHYS END RWY 34 D LAT 38 30 22.066N LONG 121 29 34.116W GEODETIC AZIMUTH 168 05 12

| ELEV* | A** | OBJECT*** | LAT | LONG | M BRG | DIST | OUTCL | OFFCL |
|---|---|---|---|---|---|---|---|---|
| 0048 | 1A | WDI | 38 31 04.201 | 121 29 40.588 | 354 7 | 4293 | 4277 | 377R |
| 0092 | 1A | TREE | 38 31 33.811 | 121 30 02.190 | 343 55 | 7593 | 7562 | 685L |

ELEVATION ACCURACY DESCRIPTION

MAGNETIC BEARING DISTANCE

DISTANCE ALONG THE RUNWAY CENTERLINE EXTENDED

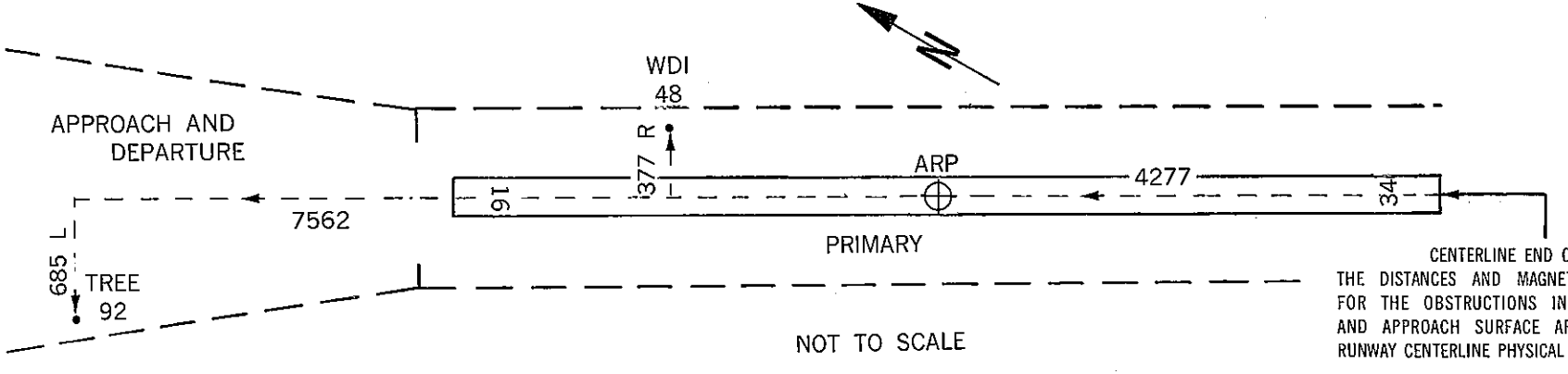
DISTANCE LEFT OR RIGHT OF CENTERLINE

*ALL DISTANCES AND ELEVATIONS ARE IN FEET

** ACCURACY IS CODED AS FOLLOWS

| HORIZONTAL (FT) | VERTICAL (FT) |
|---|---|
| 1 = 15 | A = 2 |
| 2 = 40 | B = 5 |
| | C = 20 |

*** 15 FT ADDED TO NON INTERSTATE ROAD
17 FT ADDED TO INTERSTATE ROAD
23 FT ADDED TO RAILROAD




CENTERLINE END OF RUNWAY 34

THE DISTANCES AND MAGNETIC BEARINGS COMPUTED FOR THE OBSTRUCTIONS IN THE RUNWAY PRIMARY AND APPROACH SURFACE ARE REFERENCED TO THE RUNWAY CENTERLINE PHYSICAL END.

RUNWAY 4 CONDITION C LAT 31 8 41.996N LONG 81 23 58.348W GEODETIC AZIMUTH 216 6 22

| ELEV | A | OBJECT | LAT | LONG | M BRG | DIST | OUTCL | OFFCL |
|---|---|---|---|---|---|---|---|---|
| 21 | 1A | FENCE POST | 31 9 26.818N | 81 23 23.885W | 36 16 | 5429 | 5424 | 249L |
| 24 | 1A | FENCE | 31 9 26.318N | 81 23 18.526W | 40 30 | 5660 | 5657 | 157R |
| 63 | 1A | TREE | 31 9 31.363N | 81 23 20.280W | 36 21 | 5985 | 5979 | 267L |
| 34 | 1A | ROAD (N) | 31 9 31.267N | 81 23 16.704W | 38 49 | 6155 | 6155 | 10L |
| 53 | 1A | POLE | 31 9 32.782N | 81 23 19.088W | 36 25 | 6162 | 6156 | 268L |
| 86 | 1A | TREE | 31 9 30.354N | 81 23 14.280W | 40 53 | 6208 | 6204 | 214R |
| 77 | 1A | TREE | 31 9 34.340N | 81 23 14.660W | 38 28 | 6510 | 6510 | 50L |
| 69 | 1A | TREE | 31 9 33.053N | 81 23 9.979W | 41 58 | 6654 | 6645 | 356R |
| 87 | 1A | TREE | 31 9 41.779N | 81 23 8.474W | 38 27 | 7434 | 7434 | 58L |
| 101 | 1A | TREE | 31 9 52.785N | 81 23 7.202W | 34 39 | 8421 | 8398 | 625L |
| 104 | 1A | TREE | 31 9 50.016N | 81 23 2.184W | 38 11 | 8429 | 8429 | 107L |

RUNWAY 22 CONDITION C LAT 31 9 25.700N LONG 81 23 21.282W GEODETIC AZIMUTH 36 6 41

| ELEV | A | OBJECT | LAT | LONG | M BRG | DIST | OUTCL | OFFCL |
|---|---|---|---|---|---|---|---|---|
| 21 | 1A | FENCE POST | 31 9 26.818N | 81 23 23.885W | 299 20 | 253 | 42 | 249R |
| 64 | 1A | TREE | 31 8 42.669N | 81 24 1.405W | 221 32 | 5573 | 5567 | 255R |
| 64 | 1A | TREE | 31 8 41.802N | 81 24 2.028W | 221 24 | 5675 | 5670 | 247R |
| 25 | 1A | ROAD (N) | 31 8 40.328N | 81 23 59.712W | 218 53 | 5672 | 5672 | 4L |
| 60 | 1A | TREE | 31 8 40.217N | 81 24 1.003W | 219 43 | 5748 | 5747 | 80R |
| 86 | 1A | OL POLE | 31 8 40.192N | 81 24 2.661W | 220 50 | 5837 | 5834 | 195R |
| 84 | 1A | OL ON TOWER | 31 8 37.725N | 81 23 59.211W | 217 1 | 5862 | 5859 | 194L |
| 74 | 1A | TREE | 31 8 36.377N | 81 24 3.782W | 219 21 | 6203 | 6203 | 47R |
| 89 | 1A | TREE | 31 8 33.967N | 81 24 0.250W | 215 44 | 6228 | 6219 | 345L |
| 91 | 1A | TREE | 31 8 30.575N | 81 24 4.121W | 216 34 | 6699 | 6694 | 275L |
| 87 | 1A | TREE | 31 8 27.218N | 81 24 14.732W | 220 58 | 7516 | 7511 | 271R |
| 87 | 1A | TREE | 31 8 20.561N | 81 24 10.205W | 215 40 | 7835 | 7823 | 444L |

RUNWAY 15 CONDITION AV LAT 31 9 21.360N LONG 81 23 20.860W GEODETIC AZIMUTH 334 6 57

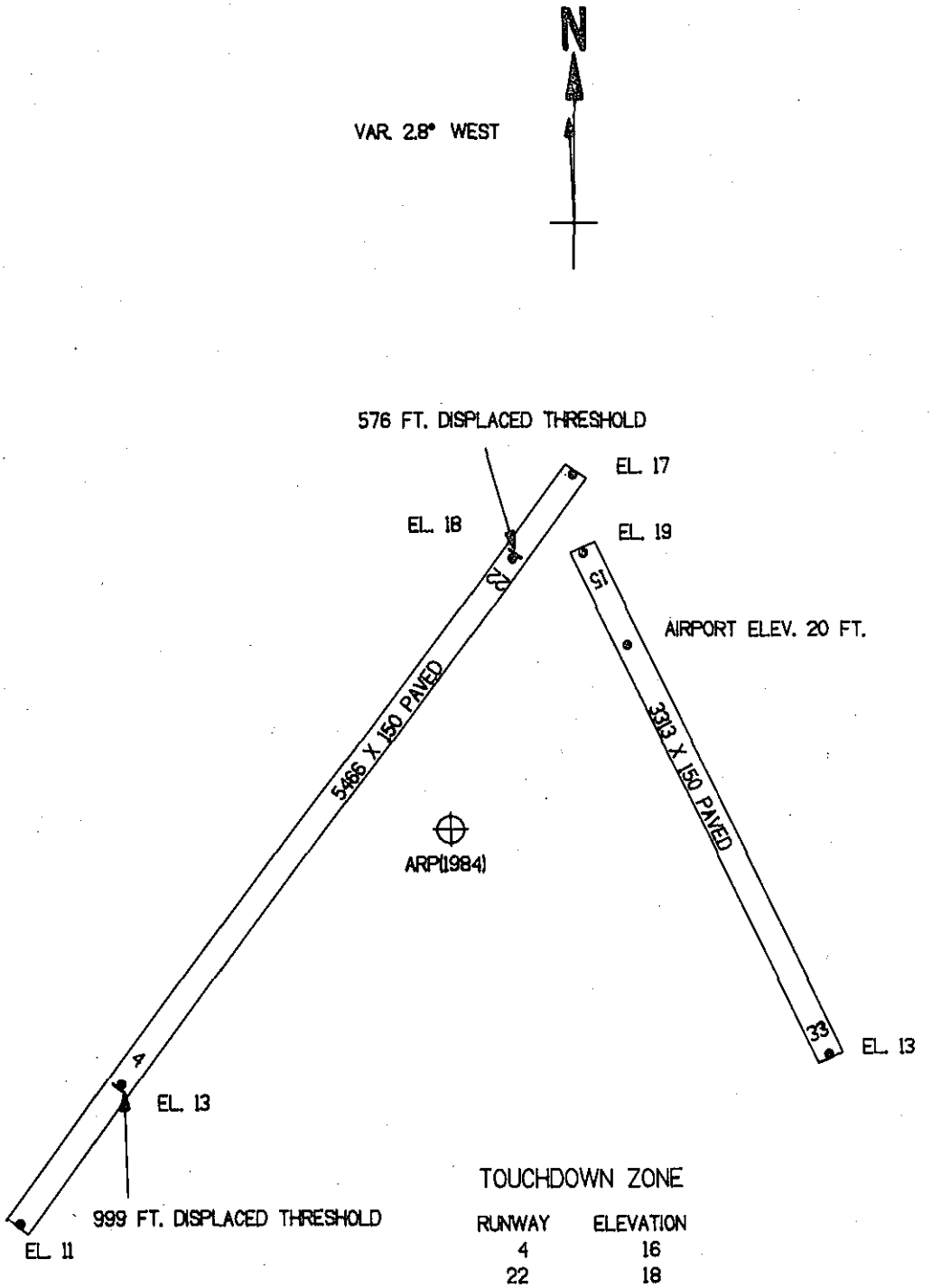
| ELEV | A | OBJECT | LAT | LONG | M | BRG | DIST | OUTCL | OFFCL |
|---|---|---|---|---|---|---|---|---|---|
| 86 | 1A | TREE | 31 8 42.182N | 81 23 0.755W | 158 | 59 | 4327 | 4324 | 156R |
| 71 | 1A | TREE | 31 8 40.376N | 81 22 56.781W | 155 | 59 | 4640 | 4639 | 75L |

RUNWAY 33 CONDITION AV LAT 31 8 51.859N LONG 81 23 4.218W GEODETIC AZIMUTH 154 7 6

| ELEV | A | OBJECT | LAT | LONG | M | BRG | DIST | OUTCL | OFFCL |
|---|---|---|---|---|---|---|---|---|---|
| 51 | 1A | TREE | 31 9 27.323N | 81 23 25.297W | 335 | 43 | 4024 | 4023 | 84L |

ARP 1984 LAT 31 9 4.891N LONG 81 23 29.522W GEODETIC AZIMUTH 0 0 0

| ELEV | A | OBJECT | LAT | LONG | M BRG | DIST |
|---|---|---|---|---|---|---|
| 76 | 1A | TREE | 31 9 11.188N | 81 23 39.476W | 309 8 | 1074 |
| 75 | 1A | OL ON TOWER | 31 9 6.275N | 81 23 42.516W | 279 52 | 1138 |
| 89 | 1A | TREE | 31 9 18.057N | 81 23 33.019W | 349 56 | 1365 |
| 67 | 1A | TREE | 31 9 2.074N | 81 23 49.264W | 263 23 | 1739 |
| 18 | 1A | FENCE | 31 8 58.539N | 81 23 48.191W | 251 13 | 1745 |
| 76 | 1A | OL ON TOWER | 31 9 22.936N | 81 23 28.381W | 5 55 | 1826 |
| 104 | 1A | TREE | 31 9 25.009N | 81 23 29.541W | 2 45 | 2033 |
| 77 | 1A | TREE | 31 9 25.316N | 81 23 27.679W | 7 14 | 2070 |
| 113 | 1A | ANT OL CTL TWR | 31 9 21.857N | 81 23 14.432W | 40 13 | 2158 |
| 98 | 1A | OL ON AIR BCN | 31 9 23.663N | 81 23 17.364W | 31 55 | 2171 |
| 77 | 1A | TREE | 31 8 48.016N | 81 23 47.550W | 225 23 | 2315 |
| 31 | 1A | ROAD (N) | 31 9 27.380N | 81 23 24.260W | 14 11 | 2318 |
| 69 | 1A | TREE | 31 8 53.212N | 81 23 54.131W | 243 55 | 2443 |
| 71 | 1A | OL ON TOWER | 31 8 51.851N | 81 23 54.780W | 241 50 | 2560 |
| 103 | 1A | TREE | 31 8 52.236N | 81 23 58.473W | 245 52 | 2822 |
| 69 | 1A | TREE | 31 8 52.270N | 81 22 59.107W | 118 33 | 2935 |
| 86 | 1A | TREE | 31 8 43.819N | 81 23 2.319W | 134 48 | 3181 |
| 82 | 1A | TREE | 31 8 45.454N | 81 24 1.141W | 237 15 | 3377 |
| 78 | 1A | TREE | 31 9 38.103N | 81 23 18.935W | 18 8 | 3480 |
| 100 | 1A | TREE | 31 8 36.266N | 81 23 55.755W | 221 3 | 3683 |
| 90 | 1A | TREE | 31 8 42.346N | 81 24 3.888W | 235 28 | 3756 |
| 104 | 1A | CHURCH SPIRE | 31 8 32.810N | 81 23 54.209W | 216 18 | 3887 |
| 85 | 1A | TREE | 31 9 43.969N | 81 23 14.659W | 20 55 | 4154 |
| 97 | 1A | TREE | 31 8 25.485N | 81 24 3.461W | 219 20 | 4955 |




TOUCHDOWN ZONE

| RUNWAY | ELEVATION |
|---|---|
| 4 | 16 |
| 22 | 18 |

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(NOT TO SCALE)