

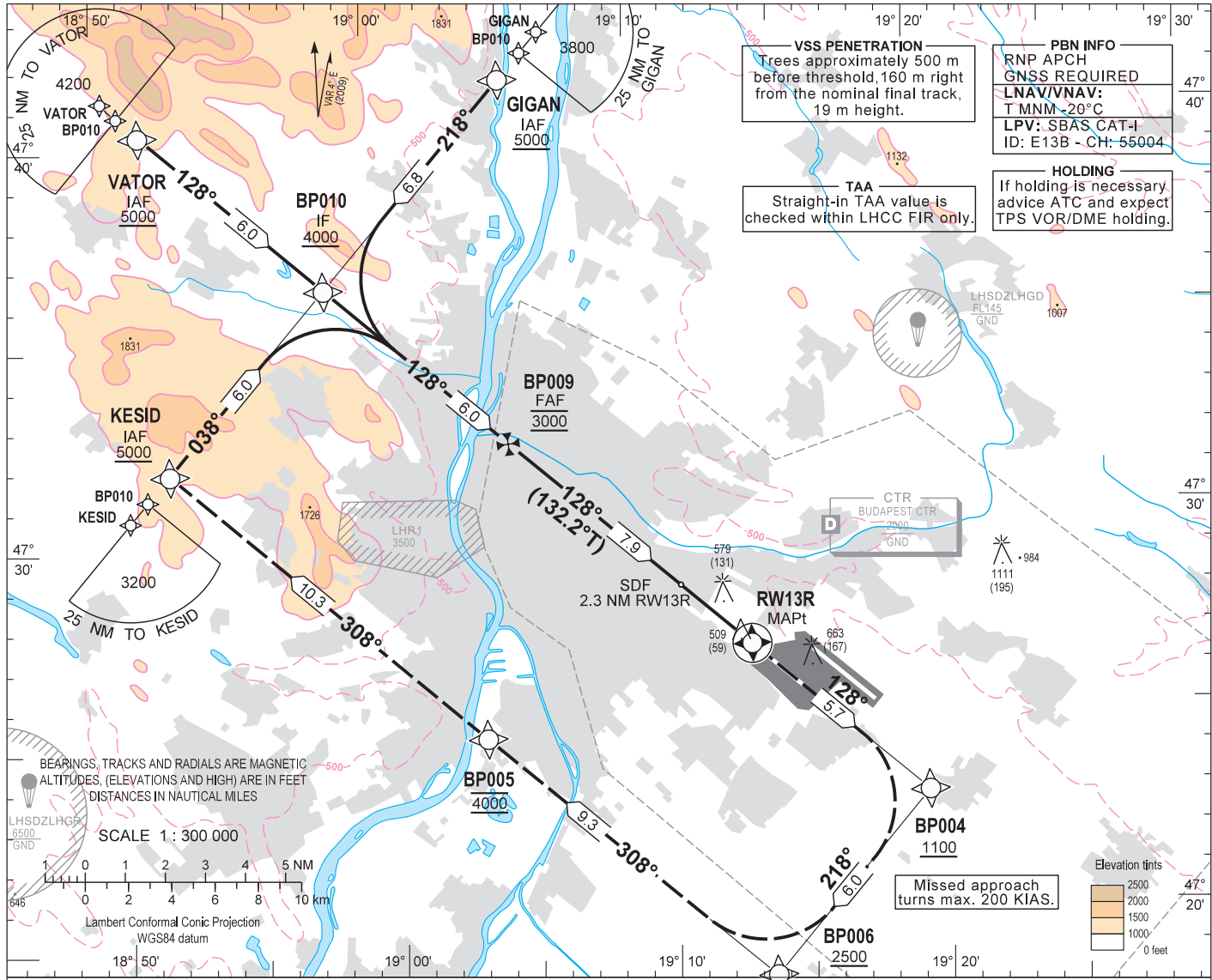
AIP HUNGARY

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV 496  
HEIGHTS RELATED TO  
THR RWY 13R - ELEV 448

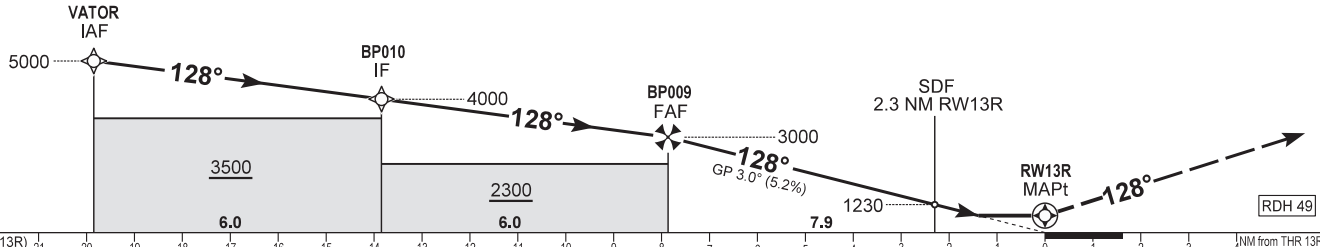
BUDAPEST APPROACH 129.700 ATIS 132.380 (117.300)  
122.975 BUDAPEST TOWER 118.100  
119.500 BUDAPEST GROUND 121.900

BUDAPEST/LISZT FERENC  
RNAV (GNSS) RWY 13R  
(ACFT CAT A, B, C, D)



TRANSITION ALTITUDE  
10000

MISSED APPROACH  
Climb to BP004 at or above 1100.  
Turn right to BP006 at or above 2500.  
Turn right to BP005 at 4000 and continue to KESID at 4000.  
Maximum turning speed 200 KIAS.



| CAT OF ACFT            |           | A         | B         | C         | D         | DIST THR / RW13R | NM                          | 7.0     | 6.0  | 5.0  | 4.0  | 3.0  | 2.0  | 1.0  | 0.0 |     |
|------------------------|-----------|-----------|-----------|-----------|-----------|------------------|-----------------------------|---------|------|------|------|------|------|------|-----|-----|
| OCA (H)<br>STRAIGHT-IN | LNAV      | 2.5% macg | 900 (446) | 920 (468) | 940 (491) | 960 (511)        | ALTITUDE                    | ft      | 2730 | 2410 | 2090 | 1770 | 1450 | 1130 | 820 | 497 |
|                        |           | 4.0% macg | 830 (377) |           |           |                  | GS                          | kt      | 80   | 100  | 120  | 140  | 160  | 180  |     |     |
|                        | LNAV/VNAV | 2.5% macg | 848 (400) | 857 (409) | 878 (430) | 905 (457)        | BP009 - RW13R (7.9 NM)      | min:sec | 5:54 | 4:43 | 3:56 | 3:22 | 2:57 | 2:37 |     |     |
|                        |           | 4.0% macg | 710 (262) | 720 (272) | 730 (282) | 740 (292)        | Rate of descent (318 ft/NM) | ft/min  | 420  | 530  | 640  | 740  | 850  | 960  |     |     |
|                        | LPV       | 2.5% macg | 848 (400) | 857 (409) | 867 (419) | 877 (429)        | CIRCLING                    | 970     | 1190 | 1310 | 1510 |      |      |      |     |     |
|                        |           | 4.0% macg | 633 (185) | 642 (194) | 652 (204) | 662 (214)        |                             |         |      |      |      |      |      |      |     |     |

**AD 2 LHBP INSTRUMENT APPROACH CHART RNAV<sub>(GNSS)</sub> RWY 13R**

via VATOR

| PT | WP ID | OverFly | Fix role | TD | VAR | CRS Val (°) | CRS Type | TIME (s) | DIST (NM) | MNM ALT (ft) | MAX ALT (ft) | IAS MAX (kt) | VRT ANG | NAV PERF |
|----|-------|---------|----------|----|-----|-------------|----------|----------|-----------|--------------|--------------|--------------|---------|----------|
| IF | VATOR |         | IAF      |    | 4.5 |             |          |          |           | 5000         |              |              |         | RNP APCH |
| TF | BP010 |         | IF       |    | 4.5 | 132.2       | TT       |          | 6.0       | 4000         |              |              |         | RNP APCH |
| TF | BP009 |         | FAF      |    | 4.5 | 132.3       | TT       |          | 6.0       | 3000         | 3000         |              |         | RNP APCH |
| TF | RW13R | Y       | MAPt     |    | 4.5 | 132.2       | TT       |          | 7.9       | 497          |              |              | -3.0    | RNP APCH |
| TF | BP004 |         | MATF     |    | 4.5 | 132.3       | TT       |          | 5.7       | 1100         |              | 200          |         | RNP APCH |
| TF | BP006 |         | MATF     |    | 4.5 | 222.4       | TT       |          | 6.0       | 2500         |              | 200          |         | RNP APCH |
| TF | BP005 |         |          |    | 4.5 | 312.1       | TT       |          | 9.3       | 4000         | 4000         | 200          |         | RNP APCH |
| TF | KESID |         |          |    | 4.5 | 312.4       | TT       |          | 10.3      | 4000         | 4000         |              |         | RNP APCH |

via GIGAN

| PT | WP ID | OverFly | Fix role | TD | VAR | CRS Val (°) | CRS Type | TIME (s) | DIST (NM) | MNM ALT (ft) | MAX ALT (ft) | IAS MAX (kt) | VRT ANG | NAV PERF |
|----|-------|---------|----------|----|-----|-------------|----------|----------|-----------|--------------|--------------|--------------|---------|----------|
| IF | GIGAN |         | IAF      |    | 4.5 |             |          |          |           | 5000         |              |              |         | RNP APCH |
| TF | BP010 |         | IF       |    | 4.5 | 222.4       | TT       |          | 6.8       | 4000         |              |              |         | RNP APCH |
| TF | BP009 |         | FAF      |    | 4.5 | 132.3       | TT       |          | 6.0       | 3000         | 3000         |              |         | RNP APCH |
| TF | RW13R | Y       | MAPt     |    | 4.5 | 132.2       | TT       |          | 7.9       | 497          |              |              | -3.0    | RNP APCH |
| TF | BP004 |         | MATF     |    | 4.5 | 132.3       | TT       |          | 5.7       | 1100         |              | 200          |         | RNP APCH |
| TF | BP006 |         | MATF     |    | 4.5 | 222.4       | TT       |          | 6.0       | 2500         |              | 200          |         | RNP APCH |
| TF | BP005 |         |          |    | 4.5 | 312.1       | TT       |          | 9.3       | 4000         | 4000         | 200          |         | RNP APCH |
| TF | KESID |         |          |    | 4.5 | 312.4       | TT       |          | 10.3      | 4000         | 4000         |              |         | RNP APCH |

via KESID

| PT | WP ID | OverFly | Fix role | TD | VAR | CRS Val (°) | CRS Type | TIME (s) | DIST (NM) | MNM ALT (ft) | MAX ALT (ft) | IAS MAX (kt) | VRT ANG | NAV PERF |
|----|-------|---------|----------|----|-----|-------------|----------|----------|-----------|--------------|--------------|--------------|---------|----------|
| IF | KESID |         | IAF      |    | 4.5 |             |          |          |           | 5000         |              |              |         | RNP APCH |
| TF | BP010 |         | IF       |    | 4.5 | 042.3       | TT       |          | 6.0       | 4000         |              |              |         | RNP APCH |
| TF | BP009 |         | FAF      |    | 4.5 | 132.3       | TT       |          | 6.0       | 3000         | 3000         |              |         | RNP APCH |
| TF | RW13R | Y       | MAPt     |    | 4.5 | 132.2       | TT       |          | 7.9       | 497          |              |              | -3.0    | RNP APCH |
| TF | BP004 |         | MATF     |    | 4.5 | 132.3       | TT       |          | 5.7       | 1100         |              | 200          |         | RNP APCH |
| TF | BP006 |         | MATF     |    | 4.5 | 222.4       | TT       |          | 6.0       | 2500         |              | 200          |         | RNP APCH |
| TF | BP005 |         |          |    | 4.5 | 312.1       | TT       |          | 9.3       | 4000         | 4000         | 200          |         | RNP APCH |
| TF | KESID |         |          |    | 4.5 | 312.4       | TT       |          | 10.3      | 4000         | 4000         |              |         | RNP APCH |

**SBAS FAS Data Block Coding Data**

**FAS-DB (CRC wrapped data)**

|                                 |  |
|---------------------------------|--|
| Operation type                  | 0  |
| SBAS provider ID                | 1  |
| Airport identifier              | LHBP   |
| RWY                             | 13R  |
| Approach performance designator | 0  |
| Route indicator                 |  |
| Reference path data selector    | 0  |
| Reference path identifier       | E13B   |
| LTP/FTP latitude                | 472655.3400N   |
| LTP/FTP longitude               | 0191314.7300E  |
| LTP/FTP ellipsoidal height (m)  | 180.2  |
| FPAP latitude                   | 472548.1575N   |
| FPAP longitude                  | 0191503.4000E  |
| Threshold crossing height (TCH) | 15   |
| TCH units                       | 1  |
| Glide path angle (degrees)      | 3.00   |
| Course width at threshold (m)   | 105.00   |
| Length offset (m)               | 72   |
| Horizontal alert limit (m)      | 40.0   |
| Vertical alert limit (m)        | 35.0   |
| Computed Data Block             | 10 10 02 08 0C 4D 00 00 02 33 31 05 D8 DE 5C 14 D4 A7 3F 08<br>0A 1B 23 F3 FD FC 50 03 2C 81 2C 01 64 09 C8 AF 5B 89 E8 EF |
| Computed CRC                    | 5B89E8EF   |

**FAS-DB (not CRC wrapped)**

|                                |       |
|--------------------------------|-------|
| ICAO code                      | LH    |
| LTP/FTP Orthometric height (m) | 136.6 |
| FPAP Orthometric height (m)    | 136.6 |

**WAYPOINT COORDINATES**

| WP ID | Latitude     | Longitude     |
|-------|--------------|---------------|
| VATOR | N47 40 15.8  | E018 51 35.1  |
| GIGAN | N47 41 17.3  | E019 04 58.0  |
| KESID | N47 31 47.2  | E018 52 10.0  |
| BP010 | N47 36 13.8  | E018 58 09.0  |
| BP009 | N47 32 12.4  | E019 04 40.2  |
| RW13R | N47 26 55.34 | E019 13 14.73 |
| BP004 | N47 23 03.3  | E019 19 29.6  |
| BP006 | N47 18 37.5  | E019 13 32.8  |
| BP005 | N47 24 52.2  | E019 03 22.1  |