



## CODING TABLE

| STAR RNAV UTBOM 2A RWY 10 |                       |          |            |           | RIO DE JANEIRO / Galeão – Antônio Carlos Jobim, INTL (SBGL) |                    |      |                           |                           |                  |                         | SBGL_STAR_02B |        | 23 MAY 19       |                          |
|---------------------------|-----------------------|----------|------------|-----------|---|--------------------|------|---------------------------|---------------------------|------------------|-------------------------|---------------|--------|-----------------|--------------------------|
| Seq Num                   | Transition Identifier | Fly Over | Rec Navaid | Fix Ident | Path and Terminator   | Course Angle       | Turn | Upper Limit Altitude (FT) | Lower Limit Altitude (FT) | Speed Limit (KT) | Speed Limit Description | TM DST        | VA (°) | Role of the Fix | Navigation Specification |
| 10                        | MAVGU                 | N        | N/A        | MAVGU     | IF  | N/A                | N/A  | N/A                       | N/A                       | N/A              | N/A                     | N/A           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 20                        | MAVGU                 | N        | N/A        | OGMUK     | TF  | 171° Mag<br>148.8T | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 8.2           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 30                        | MAVGU                 | N        | N/A        | IVREV     | TF  | 177° Mag<br>154.3T | N/A  | -25000                    | N/A                       | N/A              | N/A                     | 18.0          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 40                        | MAVGU                 | N        | N/A        | UTNUG     | TF  | 177° Mag<br>154.2T | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 30.9          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 50                        | MAVGU                 | N        | N/A        | VAKUB     | TF  | 177° Mag<br>154.2T | N/A  | -12000                    | N/A                       | N/A              | N/A                     | 10.6          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 60                        | MAVGU                 | N        | N/A        | GIGSO     | TF  | 177° Mag<br>154.2T | N/A  | N/A                       | +7000                     | N/A              | N/A                     | 6.0           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 70                        | MAVGU                 | N        | N/A        | UTBOM     | TF  | 177° Mag<br>154.1T | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 5.5           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 80                        | MAVGU                 | N        | N/A        | ALMOS     | TF  | 177° Mag<br>154.2T | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 5.1           | N/A    | IAF             | RNAV 1 or RNP 1          |
| 90                        | MAVGU                 | N        | N/A        | ALMOS     | FM  | 275° Mag           | N/A  | N/A                       | +6300                     | N/A              | N/A                     | N/A           | N/A    | IAF             | RNAV 1 or RNP 1          |
| 10                        | MOLSU                 | N        | N/A        | MOLSU     | IF  | N/A                | N/A  | N/A                       | N/A                       | N/A              | N/A                     | N/A           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 20                        | MOLSU                 | N        | N/A        | DOKTO     | TF  | 233° Mag<br>209.4T | N/A  | -28000                    | N/A                       | N/A              | N/A                     | 18.1          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 30                        | MOLSU                 | N        | N/A        | GL006     | TF  | 279° Mag<br>255.6T | N/A  | B22000                    | B19000                    | N/A              | N/A                     | 27.9          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 40                        | MOLSU                 | N        | N/A        | GL014     | TF  | 279° Mag<br>255.7T | N/A  | B20000                    | B19000                    | N/A              | N/A                     | 10.0          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 50                        | MOLSU                 | N        | N/A        | GL016     | TF  | 279° Mag<br>255.7T | N/A  | B19000                    | B15000                    | N/A              | N/A                     | 12.6          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 60                        | MOLSU                 | N        | N/A        | SURNA     | TF  | 279° Mag<br>255.8T | N/A  | N/A                       | +13000                    | N/A              | N/A                     | 13.9          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 70                        | MOLSU                 | N        | N/A        | GL017     | TF  | 224° Mag<br>201.2T | N/A  | -12000                    | N/A                       | N/A              | N/A                     | 5.0           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 80                        | MOLSU                 | N        | N/A        | GIGSO     | TF  | 224° Mag<br>201.3T | N/A  | N/A                       | +7000                     | N/A              | N/A                     | 7.1           | N/A    | OTHER           | RNAV 1 or RNP 1          |

|     |       |   |     |       |    |                         |     |     |       |     |     |     |     |       |                 |
|-----|-------|---|-----|-------|----|-------------------------|-----|-----|-------|-----|-----|-----|-----|-------|-----------------|
| 90  | MOLSU | N | N/A | UTBOM | TF | 177° Mag<br>154.1° True | N/A | N/A | +6300 | N/A | N/A | 5.5 | N/A | OTHER | RNAV 1 or RNP 1 |
| 100 | MOLSU | N | N/A | ALMOS | TF | 177° Mag<br>154.2T      | N/A | N/A | +6300 | N/A | N/A | 5.1 | N/A | IAF   | RNAV 1 or RNP 1 |
| 110 | MOLSU | N | N/A | ALMOS | FM | 275° Mag                | N/A | N/A | +6300 | N/A | N/A | N/A | N/A | IAF   | RNAV 1 or RNP 1 |

| STAR RNAV MEBGA 1A RWY 10 |                       |          |            |           | RIO DE JANEIRO / Galeão – Antônio Carlos Jobim, INTL (SBGL) |                        |      |                           |                           |                  |                         | SBGL_STAR_02B |        | 23 MAY 19       |                          |
|---------------------------|-----------------------|----------|------------|-----------|---|------------------------|------|---------------------------|---------------------------|------------------|-------------------------|---------------|--------|-----------------|--------------------------|
| Seq Num                   | Transition Identifier | Fly Over | Rec Navaid | Fix Ident | Path and Terminator   | Course Angle           | Turn | Upper Limit Altitude (FT) | Lower Limit Altitude (FT) | Speed Limit (KT) | Speed Limit Description | TM DST        | VA (°) | Role of the Fix | Navigation Specification |
| 10                        | MEBGA                 | N        | N/A        | MEBGA     | IF  | N/A                    | N/A  | N/A                       | N/A                       | N/A              | N/A                     | N/A           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 20                        | MEBGA                 | N        | N/A        | KOSRU     | TF  | 120° Mag<br>97.7T      | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 8.7           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 30                        | MEBGA                 | N        | N/A        | PAI       | TF  | 120° Mag<br>97.7T True | N/A  | N/A                       | +11000                    | N/A              | N/A                     | 6.7           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 40                        | MEBGA                 | N        | N/A        | GL021     | TF  | 117° Mag<br>94.2T      | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 5.0           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 50                        | MEBGA                 | N        | N/A        | UTBOM     | TF  | 153° Mag<br>130.4T     | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 16.7          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 60                        | MEBGA                 | N        | N/A        | ALMOS     | TF  | 177° Mag<br>154.2T     | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 5.1           | N/A    | IAF             | RNAV 1 or RNP 1          |
| 70                        | MEBGA                 | N        | N/A        | ALMOS     | FM  | 275° Mag               | N/A  | N/A                       | +6300                     | N/A              | N/A                     | N/A           | N/A    | IAF             | RNAV 1 or RNP 1          |

| STAR RNAV UTBOM 2A RWY 15 |                       |          |            |           | RIO DE JANEIRO / Galeão – Antônio Carlos Jobim, INTL (SBGL) |                    |      |                           |                           |                  |                         | SBGL_STAR_02B |        | 23 MAY 19       |                          |
|---------------------------|-----------------------|----------|------------|-----------|---|--------------------|------|---------------------------|---------------------------|------------------|-------------------------|---------------|--------|-----------------|--------------------------|
| Seq Num                   | Transition Identifier | Fly Over | Rec Navaid | Fix Ident | Path and Terminator   | Course Angle       | Turn | Upper Limit Altitude (FT) | Lower Limit Altitude (FT) | Speed Limit (KT) | Speed Limit Description | TM DST        | VA (°) | Role of the Fix | Navigation Specification |
| 10                        | MAVGU                 | N        | N/A        | MAVGU     | IF  | N/A                | N/A  | N/A                       | N/A                       | N/A              | N/A                     | N/A           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 20                        | MAVGU                 | N        | N/A        | OGMUK     | TF  | 171° Mag<br>148.8T | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 8.2           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 30                        | MAVGU                 | N        | N/A        | IVREV     | TF  | 177° Mag<br>154.3T | N/A  | -25000                    | N/A                       | N/A              | N/A                     | 18.0          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 40                        | MAVGU                 | N        | N/A        | UTNUG     | TF  | 177° Mag<br>154.2T | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 30.9          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 50                        | MAVGU                 | N        | N/A        | VAKUB     | TF  | 177° Mag<br>154.2T | N/A  | -12000                    | N/A                       | N/A              | N/A                     | 10.6          | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 60                        | MAVGU                 | N        | N/A        | GIGSO     | TF  | 177° Mag<br>154.2T | N/A  | N/A                       | +7000                     | N/A              | N/A                     | 6.0           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 70                        | MAVGU                 | N        | N/A        | UTBOM     | TF  | 177° Mag<br>154.1T | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 5.5           | N/A    | IAF             | RNAV 1 or RNP 1          |

|    |       |   |     |       |    |                         |     |        |        |     |     |      |     |       |                 |
|----|-------|---|-----|-------|----|-------------------------|-----|--------|--------|-----|-----|------|-----|-------|-----------------|
| 10 | MOLSU | N | N/A | MOLSU | IF | N/A                     | N/A | N/A    | N/A    | N/A | N/A | N/A  | N/A | OTHER | RNAV 1 or RNP 1 |
| 20 | MOLSU | N | N/A | DOKTO | TF | 233° Mag<br>209.4T      | N/A | -28000 | N/A    | N/A | N/A | 18.1 | N/A | OTHER | RNAV 1 or RNP 1 |
| 30 | MOLSU | N | N/A | GL006 | TF | 279° Mag<br>255.6T      | N/A | B22000 | B19000 | N/A | N/A | 27.9 | N/A | OTHER | RNAV 1 or RNP 1 |
| 40 | MOLSU | N | N/A | GL014 | TF | 279° Mag<br>255.7T      | N/A | B20000 | B19000 | N/A | N/A | 10.0 | N/A | OTHER | RNAV 1 or RNP 1 |
| 50 | MOLSU | N | N/A | GL016 | TF | 279° Mag<br>255.7T      | N/A | B19000 | B15000 | N/A | N/A | 12.6 | N/A | OTHER | RNAV 1 or RNP 1 |
| 60 | MOLSU | N | N/A | SURNA | TF | 279° Mag<br>255.8T      | N/A | N/A    | +13000 | N/A | N/A | 13.9 | N/A | OTHER | RNAV 1 or RNP 1 |
| 70 | MOLSU | N | N/A | GL017 | TF | 224° Mag<br>201.2T      | N/A | -12000 | N/A    | N/A | N/A | 5.0  | N/A | OTHER | RNAV 1 or RNP 1 |
| 80 | MOLSU | N | N/A | GIGSO | TF | 224° Mag<br>201.3T      | N/A | N/A    | +7000  | N/A | N/A | 7.1  | N/A | OTHER | RNAV 1 or RNP 1 |
| 90 | MOLSU | N | N/A | UTBOM | TF | 177° Mag<br>154.1° True | N/A | N/A    | +6300  | N/A | N/A | 5.5  | N/A | IAF   | RNAV 1 or RNP 1 |

| STAR RNAV MEBGA 1A RWY 15 |                       |          |            |           | RIO DE JANEIRO / Galeão – Antônio Carlos Jobim, INTL (SBGL) |                        |      |                           |                           |                  |                         | SBGL_STAR_02B |        | 23 MAY 19       |                          |
|---------------------------|-----------------------|----------|------------|-----------|---|------------------------|------|---------------------------|---------------------------|------------------|-------------------------|---------------|--------|-----------------|--------------------------|
| Seq Num                   | Transition Identifier | Fly Over | Rec Navaid | Fix Ident | Path and Terminator   | Course Angle           | Turn | Upper Limit Altitude (FT) | Lower Limit Altitude (FT) | Speed Limit (KT) | Speed Limit Description | TM DST        | VA (°) | Role of the Fix | Navigation Specification |
| 10                        | MEBGA                 | N        | N/A        | MEBGA     | IF  | N/A                    | N/A  | N/A                       | N/A                       | N/A              | N/A                     | N/A           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 20                        | MEBGA                 | N        | N/A        | KOSRU     | TF  | 120° Mag<br>97.7T      | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 8.7           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 30                        | MEBGA                 | N        | N/A        | PAI       | TF  | 120° Mag<br>97.7T True | N/A  | N/A                       | +11000                    | N/A              | N/A                     | 6.7           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 40                        | MEBGA                 | N        | N/A        | GL021     | TF  | 117° Mag<br>94.2T      | N/A  | N/A                       | N/A                       | N/A              | N/A                     | 5.0           | N/A    | OTHER           | RNAV 1 or RNP 1          |
| 50                        | MEBGA                 | N        | N/A        | UTBOM     | TF  | 153° Mag<br>130.4T     | N/A  | N/A                       | +6300                     | N/A              | N/A                     | 16.7          | N/A    | IAF             | RNAV 1 or RNP 1          |

| Ident | Latitude / Longitude (WGS84)<br>DD:MM:SS.SS |
|-------|---|
| PAI   | S 22:27:14.59W 43:50:25.82                  |
| MAVGU | S 21:27:20.04W 44:08:59.08                  |
| OGMUK | S 21:34:23.67W 44:04:25.01                  |
| IVREV | S 21:50:40.56W 43:56:02.65                  |
| UTNUG | S 22:18:34.54W 43:41:36.82                  |
| VAKUB | S 22:28:09.13W 43:36:38.13                  |
| MOLSU | S 21:50:23.40W 42:12:17.40                  |
| DOKTO | S 22:06:15.36W 42:21:52.62                  |
| GL006 | S 22:13:15.23W 42:50:58.83                  |
| GL014 | S 22:15:44.46W 43:01:25.41                  |
| GL016 | S 22:18:51.52W 43:14:35.42                  |
| SURNA | S 22:22:16.07W 43:29:05.17                  |
| GL017 | S 22:26:55.88W 43:31:02.07                  |
| GIGSO | S 22:33:34.30W 43:33:48.77                  |
| MEBGA | S 22:25:09.60W 44:06:56.40                  |
| KOSRU | S 22:26:20.49W 43:57:36.30                  |
| GL021 | S 22:27:36.46W 43:45:02.08                  |
| UTBOM | S 22:38:31.80W 43:31:13.20                  |
| ALMOS | S 22:43:06.90W 43:28:49.92                  |

| COD | Meaning        |
|-----|----------------|
| +   | AT OR ABOVE    |
| -   | AT OR BELOW    |
| @   | AT             |
| R   | RECOMMENDED    |
| B   | BETWEEN        |
| =   | AS ASSIGNED    |
| SDF | STEPDOWN FIX   |
| Y   | YES            |
| N   | NO             |
| L   | LEFT           |
| R   | RIGHT          |
| N/A | NOT APPLICABLE |