

Statement A  
**COMPREHENSIVE ENGINEERING STATEMENT**  
prepared for  
**University of North Texas**  
KNTU(FM) AUXILIARY McKinney, Texas  
Facility ID 69003  
Ch. 201C1 79 kW 111 m

*University of North Texas* (“*Texas*”), is the licensee of FM radio station KNTU(FM) (Ch. 201C1, McKinney, Texas). A Construction Permit has been granted to KNTU(FM) (FCC file number 0000193658) to reduce power and to operate as an omni-directional facility. A license to cover application is now pending (LMS file number 0000204739). *Texas* herein proposes to modify the station’s auxiliary antenna, to specify operation at reduced power in accordance with §73.1675 of the Rules. Specifically, *Texas* seeks to locate the auxiliary antenna at 33° 17’ 24.0” N Latitude and 97° 08’ 11.0” W Longitude (NAD 83), with an Effective Radiated Power (“ERP”) of 79 kW and an antenna height above average terrain (“HAAT”) of 111 meters. The coordinates specified represent a minor correction in order to agree with the registered tower (ASR 1053099). As the modification involves a simple power reduction, *Texas* is prepared to commence “construction” as soon as a CP is granted.

**Figure 1** demonstrates that the 60 dB $\mu$  (1 mV/m) contour of the proposed auxiliary facility will not extend beyond the bounds of the 60 dB $\mu$  contour of the authorized main facility (file number 0000193658), in compliance with §73.1675(a)(1). The listing in **Table I** is being provided to demonstrate that the proposed auxiliary operation does not exceed the newly authorized main facility’s 60 dB $\mu$  contour in any direction. Because minimum distance spacing and contour protection rules do not apply to auxiliary facilities, the instant proposal is believed to comply with all pertinent FCC allocations requirements.

Based on data extracted from the FCC’s CDBS database, there are no Standard Broadcast AM stations located within 20 km of the proposed site. The closest AM station is KATH(AM) (910 kHz, Frisco, TX) at a distance of 23.6 km. Thus, the proposal will not require further study with respect to nearby AM facilities. The nearest FCC monitoring station is at Kingsville, Texas at a distance of 652.3 km from the proposed site. This exceeds by a great margin the minimum distance specified in §73.1030(c)(3)(iv) that would suggest consideration of the monitoring station.

It is thus believed that the facility proposed herein will satisfy all of the pertinent Commission Rules and Policies now in effect regarding allocation matters for an auxiliary facility.

### **Environmental Considerations**

The proposed antenna is a Jampro model JSCP-6R, which is a 6-bay, full wave spaced antenna, which corresponds to the EPA Type 2: Opposed V Dipole style. It is side-mounted on an existing unregistered

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antenna support structure. The proposed effective radiated power (“ERP”) is 79 kilowatts with an antenna height above ground of 116 meters.

The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. No change in structure height is proposed, thus no change in current structure marking and lighting requirements is anticipated. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

**Human Exposure to Radiofrequency Radiation**

In keeping with §1.1307(b) of the Commission’s Rules, the proposed operation has been evaluated for human exposure to radiofrequency energy using the procedures outlined by the Federal Communications Commission in FCC OET Bulletin 65 (“OET-65”). OET-65 describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines specified in §1.1310 of the Commission’s Rules. Under present Commission policy, a facility may be presumed to comply with the limits in §1.1310 of the Commission’s Rules if it satisfies the exposure criteria set forth in OET-65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

The general population/uncontrolled maximum permitted exposure (“MPE”) limit specified in §1.1310 for the entire FM broadcast band is  $200 \mu\text{W}/\text{cm}^2$ . For the purpose of this study, “public access” will be considered at the base of the tower at a location two meters above ground. Using the FCC’s FM Model program and an EPA Type 2: Opposed V Dipole antenna, it was determined that the proposed facility would contribute a worst-case RF power density of  $45.2 \mu\text{W}/\text{cm}^2$  at two meters above ground level near the antenna support structure, or 22.6 percent of the general population/uncontrolled limit. Thus, based on this analysis, the Commission’s limit regarding general population / uncontrolled exposure to RF electromagnetic field is not exceeded at ground level locations near the KNTU(FM) Auxiliary site location. The only other authorized broadcast facility on the tower is the KNTU Main antenna, which will not operate at the same time, so consideration of the main is not a concern. No other broadcasters are close enough to have a significant additional contribution to exposure levels at this location.

**Safety of Tower Workers and the General Public**

As demonstrated herein, excessive levels of RF energy attributable to KNTU(FM) will not be caused at publicly accessible areas at ground level near the antenna supporting structure. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission’s guidelines. Nevertheless,

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appropriate RF exposure warning signs will be posted and access will be restricted by fencing and other appropriate means.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure would not occur in areas at ground level. A site exposure policy is employed protecting maintenance workers from excessive exposure when work must be performed on the tower or in areas where high RF levels may be present. Such protective measures include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines would otherwise be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas.

**Conclusion**

Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under § 1.1306 of the Rules; hence preparation of an Environmental Assessment is not required.



Table I  
**MAIN / AUX CONTOUR DISTANCE COMPARISON**  
 prepared November 2022 for  
**University of North Texas**  
 KNTU(FM) Auxiliary McKinney, TX  
 Facility ID 69003  
 Chan 201C1 79 kW 111 m

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| 0                | 50.58             | 50.30            | OK    |
| 1                | 50.41             | 50.08            | OK    |
| 2                | 50.45             | 50.08            | OK    |
| 3                | 50.46             | 50.09            | OK    |
| 4                | 50.53             | 50.17            | OK    |
| 5                | 50.63             | 50.27            | OK    |
| 6                | 50.66             | 50.33            | OK    |
| 7                | 50.64             | 50.31            | OK    |
| 8                | 50.75             | 50.43            | OK    |
| 9                | 50.80             | 50.51            | OK    |
| 10               | 50.73             | 50.43            | OK    |
| 11               | 50.67             | 50.33            | OK    |
| 12               | 50.76             | 50.44            | OK    |
| 13               | 50.70             | 50.38            | OK    |
| 14               | 50.67             | 50.34            | OK    |
| 15               | 50.72             | 50.38            | OK    |
| 16               | 50.93             | 50.61            | OK    |
| 17               | 51.04             | 50.77            | OK    |
| 18               | 51.00             | 50.75            | OK    |
| 19               | 50.90             | 50.63            | OK    |
| 20               | 50.68             | 50.39            | OK    |
| 21               | 50.55             | 50.22            | OK    |
| 22               | 50.47             | 50.12            | OK    |
| 23               | 50.44             | 50.08            | OK    |
| 24               | 50.42             | 50.04            | OK    |
| 25               | 50.37             | 49.99            | OK    |
| 26               | 50.39             | 49.99            | OK    |
| 27               | 50.55             | 50.18            | OK    |
| 28               | 50.72             | 50.38            | OK    |
| 29               | 50.80             | 50.49            | OK    |
| 30               | 50.94             | 50.64            | OK    |
| 31               | 51.02             | 50.74            | OK    |
| 32               | 51.10             | 50.84            | OK    |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| 33               | 51.20             | 50.95            | OK    |
| 34               | 51.28             | 51.03            | OK    |
| 35               | 51.47             | 51.23            | OK    |
| 36               | 51.67             | 51.46            | OK    |
| 37               | 51.93             | 51.75            | OK    |
| 38               | 52.08             | 51.93            | OK    |
| 39               | 52.14             | 51.99            | OK    |
| 40               | 52.19             | 52.05            | OK    |
| 41               | 52.23             | 52.10            | OK    |
| 42               | 52.23             | 52.11            | OK    |
| 43               | 52.05             | 51.94            | OK    |
| 44               | 51.89             | 51.75            | OK    |
| 45               | 51.77             | 51.62            | OK    |
| 46               | 51.65             | 51.48            | OK    |
| 47               | 51.63             | 51.45            | OK    |
| 48               | 51.68             | 51.51            | OK    |
| 49               | 51.72             | 51.55            | OK    |
| 50               | 51.72             | 51.55            | OK    |
| 51               | 51.57             | 51.41            | OK    |
| 52               | 51.32             | 51.11            | OK    |
| 53               | 51.31             | 51.08            | OK    |
| 54               | 51.47             | 51.24            | OK    |
| 55               | 51.64             | 51.45            | OK    |
| 56               | 51.83             | 51.67            | OK    |
| 57               | 51.96             | 51.81            | OK    |
| 58               | 52.03             | 51.89            | OK    |
| 59               | 52.05             | 51.91            | OK    |
| 60               | 52.01             | 51.88            | OK    |
| 61               | 51.98             | 51.84            | OK    |
| 62               | 52.13             | 51.99            | OK    |
| 63               | 52.35             | 52.23            | OK    |
| 64               | 52.49             | 52.38            | OK    |
| 65               | 52.57             | 52.47            | OK    |
| 66               | 52.62             | 52.51            | OK    |
| 67               | 52.76             | 52.66            | OK    |
| 68               | 52.97             | 52.88            | OK    |
| 69               | 53.25             | 53.18            | OK    |
| 70               | 53.26             | 53.21            | OK    |
| 71               | 53.05             | 52.99            | OK    |
| 72               | 52.97             | 52.89            | OK    |
| 73               | 52.82             | 52.75            | OK    |
| 74               | 52.68             | 52.58            | OK    |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| 75               | 52.57             | 52.47            | OK    |
| 76               | 52.51             | 52.40            | OK    |
| 77               | 52.55             | 52.45            | OK    |
| 78               | 52.58             | 52.48            | OK    |
| 79               | 52.60             | 52.50            | OK    |
| 80               | 52.63             | 52.53            | OK    |
| 81               | 52.63             | 52.52            | OK    |
| 82               | 52.63             | 52.53            | OK    |
| 83               | 52.64             | 52.53            | OK    |
| 84               | 52.69             | 52.59            | OK    |
| 85               | 52.70             | 52.58            | OK    |
| 86               | 52.61             | 52.50            | OK    |
| 87               | 52.50             | 52.37            | OK    |
| 88               | 52.46             | 52.32            | OK    |
| 89               | 52.48             | 52.33            | OK    |
| 90               | 52.51             | 52.36            | OK    |
| 91               | 52.58             | 52.43            | OK    |
| 92               | 52.61             | 52.45            | OK    |
| 93               | 52.65             | 52.48            | OK    |
| 94               | 52.69             | 52.50            | OK    |
| 95               | 52.76             | 52.57            | OK    |
| 96               | 52.82             | 52.62            | OK    |
| 97               | 52.84             | 52.62            | OK    |
| 98               | 52.93             | 52.69            | OK    |
| 99               | 52.95             | 52.71            | OK    |
| 100              | 52.98             | 52.73            | OK    |
| 101              | 52.99             | 52.66            | OK    |
| 102              | 53.00             | 52.60            | OK    |
| 103              | 53.05             | 52.58            | OK    |
| 104              | 53.13             | 52.60            | OK    |
| 105              | 53.31             | 52.72            | OK    |
| 106              | 53.55             | 52.91            | OK    |
| 107              | 53.74             | 53.03            | OK    |
| 108              | 53.78             | 53.01            | OK    |
| 109              | 53.80             | 52.96            | OK    |
| 110              | 53.84             | 52.92            | OK    |
| 111              | 53.85             | 52.79            | OK    |
| 112              | 53.88             | 52.69            | OK    |
| 113              | 53.83             | 52.50            | OK    |
| 114              | 53.72             | 52.24            | OK    |
| 115              | 53.61             | 51.98            | OK    |
| 116              | 53.60             | 51.81            | OK    |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| -----            | -----             | -----            | ----- |
| 117              | 53.61             | 51.72            | OK    |
| 118              | 53.65             | 51.61            | OK    |
| 119              | 53.67             | 51.48            | OK    |
| 120              | 53.67             | 51.34            | OK    |
| 121              | 53.67             | 51.18            | OK    |
| 122              | 53.82             | 51.18            | OK    |
| 123              | 53.97             | 51.19            | OK    |
| 124              | 53.96             | 51.00            | OK    |
| 125              | 53.90             | 50.76            | OK    |
| 126              | 53.88             | 50.56            | OK    |
| 127              | 53.85             | 50.35            | OK    |
| 128              | 53.83             | 50.16            | OK    |
| 129              | 53.81             | 49.95            | OK    |
| 130              | 53.80             | 49.77            | OK    |
| 131              | 53.81             | 49.62            | OK    |
| 132              | 53.80             | 49.45            | OK    |
| 133              | 53.80             | 49.29            | OK    |
| 134              | 53.78             | 49.10            | OK    |
| 135              | 53.76             | 48.90            | OK    |
| 136              | 53.76             | 48.74            | OK    |
| 137              | 53.78             | 48.60            | OK    |
| 138              | 53.80             | 48.44            | OK    |
| 139              | 53.81             | 48.30            | OK    |
| 140              | 53.83             | 48.14            | OK    |
| 141              | 53.76             | 47.97            | OK    |
| 142              | 53.66             | 47.79            | OK    |
| 143              | 53.57             | 47.61            | OK    |
| 144              | 53.42             | 47.37            | OK    |
| 145              | 53.28             | 47.16            | OK    |
| 146              | 53.21             | 47.01            | OK    |
| 147              | 53.25             | 46.98            | OK    |
| 148              | 53.26             | 46.91            | OK    |
| 149              | 53.21             | 46.78            | OK    |
| 150              | 53.22             | 46.73            | OK    |
| 151              | 53.16             | 46.73            | OK    |
| 152              | 53.06             | 46.69            | OK    |
| 153              | 52.93             | 46.62            | OK    |
| 154              | 52.77             | 46.52            | OK    |
| 155              | 52.65             | 46.47            | OK    |
| 156              | 52.52             | 46.42            | OK    |
| 157              | 52.42             | 46.40            | OK    |
| 158              | 52.31             | 46.35            | OK    |



| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| -----            | -----             | -----            | ----- |
| 159              | 52.11             | 46.22            | OK    |
| 160              | 52.00             | 46.18            | OK    |
| 161              | 51.90             | 46.53            | OK    |
| 162              | 51.82             | 46.88            | OK    |
| 163              | 51.58             | 47.03            | OK    |
| 164              | 51.31             | 47.17            | OK    |
| 165              | 51.20             | 47.47            | OK    |
| 166              | 51.15             | 47.84            | OK    |
| 167              | 51.14             | 48.23            | OK    |
| 168              | 51.14             | 48.62            | OK    |
| 169              | 51.11             | 48.96            | OK    |
| 170              | 51.05             | 49.27            | OK    |
| 171              | 50.90             | 48.91            | OK    |
| 172              | 50.94             | 48.77            | OK    |
| 173              | 51.01             | 48.61            | OK    |
| 174              | 50.98             | 48.38            | OK    |
| 175              | 50.96             | 48.16            | OK    |
| 176              | 50.99             | 47.98            | OK    |
| 177              | 50.96             | 47.72            | OK    |
| 178              | 50.88             | 47.43            | OK    |
| 179              | 50.86             | 47.21            | OK    |
| 180              | 50.91             | 47.06            | OK    |
| 181              | 50.93             | 46.71            | OK    |
| 182              | 50.96             | 46.35            | OK    |
| 183              | 50.98             | 46.00            | OK    |
| 184              | 51.05             | 45.70            | OK    |
| 185              | 51.13             | 45.36            | OK    |
| 186              | 50.95             | 44.76            | OK    |
| 187              | 50.83             | 44.22            | OK    |
| 188              | 50.72             | 43.72            | OK    |
| 189              | 50.67             | 43.24            | OK    |
| 190              | 50.62             | 42.76            | OK    |
| 191              | 50.63             | 43.20            | OK    |
| 192              | 50.63             | 43.63            | OK    |
| 193              | 50.63             | 44.04            | OK    |
| 194              | 50.60             | 44.41            | OK    |
| 195              | 50.62             | 44.82            | OK    |
| 196              | 50.61             | 45.20            | OK    |
| 197              | 50.56             | 45.52            | OK    |
| 198              | 50.54             | 45.87            | OK    |
| 199              | 50.49             | 46.18            | OK    |
| 200              | 50.41             | 46.43            | OK    |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| -----            | -----             | -----            | ----- |
| 201              | 50.22             | 46.61            | OK    |
| 202              | 50.12             | 46.85            | OK    |
| 203              | 50.11             | 47.23            | OK    |
| 204              | 50.17             | 47.67            | OK    |
| 205              | 50.17             | 48.02            | OK    |
| 206              | 50.14             | 48.35            | OK    |
| 207              | 50.18             | 48.76            | OK    |
| 208              | 50.20             | 49.11            | OK    |
| 209              | 50.15             | 49.38            | OK    |
| 210              | 50.08             | 49.60            | OK    |
| 211              | 49.95             | 49.44            | OK    |
| 212              | 49.90             | 49.39            | OK    |
| 213              | 49.93             | 49.42            | OK    |
| 214              | 50.03             | 49.56            | OK    |
| 215              | 50.07             | 49.59            | OK    |
| 216              | 50.03             | 49.54            | OK    |
| 217              | 49.92             | 49.39            | OK    |
| 218              | 49.81             | 49.26            | OK    |
| 219              | 49.78             | 49.21            | OK    |
| 220              | 49.71             | 49.13            | OK    |
| 221              | 49.68             | 49.10            | OK    |
| 222              | 49.70             | 49.11            | OK    |
| 223              | 49.66             | 49.05            | OK    |
| 224              | 49.54             | 48.90            | OK    |
| 225              | 49.47             | 48.81            | OK    |
| 226              | 49.39             | 48.70            | OK    |
| 227              | 49.28             | 48.55            | OK    |
| 228              | 49.12             | 48.33            | OK    |
| 229              | 49.06             | 48.27            | OK    |
| 230              | 48.99             | 48.16            | OK    |
| 231              | 48.98             | 48.15            | OK    |
| 232              | 49.06             | 48.29            | OK    |
| 233              | 49.07             | 48.29            | OK    |
| 234              | 49.00             | 48.19            | OK    |
| 235              | 48.91             | 48.07            | OK    |
| 236              | 48.86             | 48.00            | OK    |
| 237              | 48.82             | 47.94            | OK    |
| 238              | 48.76             | 47.87            | OK    |
| 239              | 48.62             | 47.67            | OK    |
| 240              | 48.50             | 47.52            | OK    |
| 241              | 48.38             | 47.37            | OK    |
| 242              | 48.29             | 47.26            | OK    |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| -----            | -----             | -----            | ----- |
| 243              | 48.24             | 47.18            | OK    |
| 244              | 48.17             | 47.10            | OK    |
| 245              | 48.13             | 47.05            | OK    |
| 246              | 48.06             | 46.95            | OK    |
| 247              | 47.97             | 46.84            | OK    |
| 248              | 47.92             | 46.78            | OK    |
| 249              | 47.84             | 46.67            | OK    |
| 250              | 47.72             | 46.52            | OK    |
| 251              | 47.58             | 46.35            | OK    |
| 252              | 47.52             | 46.28            | OK    |
| 253              | 47.47             | 46.22            | OK    |
| 254              | 47.48             | 46.22            | OK    |
| 255              | 47.45             | 46.20            | OK    |
| 256              | 47.45             | 46.19            | OK    |
| 257              | 47.41             | 46.13            | OK    |
| 258              | 47.36             | 46.07            | OK    |
| 259              | 47.32             | 46.02            | OK    |
| 260              | 47.23             | 45.92            | OK    |
| 261              | 47.21             | 45.89            | OK    |
| 262              | 47.17             | 45.84            | OK    |
| 263              | 47.15             | 45.82            | OK    |
| 264              | 47.11             | 45.76            | OK    |
| 265              | 47.08             | 45.74            | OK    |
| 266              | 47.08             | 45.72            | OK    |
| 267              | 47.08             | 45.72            | OK    |
| 268              | 47.10             | 45.74            | OK    |
| 269              | 47.13             | 45.78            | OK    |
| 270              | 47.13             | 45.78            | OK    |
| 271              | 47.14             | 45.80            | OK    |
| 272              | 47.23             | 45.91            | OK    |
| 273              | 47.31             | 46.02            | OK    |
| 274              | 47.36             | 46.08            | OK    |
| 275              | 47.32             | 46.03            | OK    |
| 276              | 47.25             | 45.94            | OK    |
| 277              | 47.20             | 45.88            | OK    |
| 278              | 47.17             | 45.84            | OK    |
| 279              | 47.14             | 45.81            | OK    |
| 280              | 47.14             | 45.81            | OK    |
| 281              | 47.14             | 45.81            | OK    |
| 282              | 47.11             | 45.77            | OK    |
| 283              | 47.10             | 45.74            | OK    |
| 284              | 47.05             | 45.68            | OK    |

| <b>Azimuth<br/>(deg)</b> | <b>Main Dist<br/>(km)</b> | <b>Aux Dist<br/>(km)</b> | <b>Check</b> |
|--------------------------|---------------------------|--------------------------|--------------|
| -----                    | -----                     | -----                    | -----        |
| 285                      | 46.92                     | 45.53                    | OK           |
| 286                      | 46.75                     | 45.31                    | OK           |
| 287                      | 46.68                     | 45.21                    | OK           |
| 288                      | 46.74                     | 45.29                    | OK           |
| 289                      | 46.84                     | 45.41                    | OK           |
| 290                      | 47.03                     | 45.64                    | OK           |
| 291                      | 47.28                     | 45.96                    | OK           |
| 292                      | 47.59                     | 46.35                    | OK           |
| 293                      | 47.83                     | 46.65                    | OK           |
| 294                      | 48.03                     | 46.89                    | OK           |
| 295                      | 48.30                     | 47.23                    | OK           |
| 296                      | 48.65                     | 47.68                    | OK           |
| 297                      | 48.84                     | 47.94                    | OK           |
| 298                      | 49.00                     | 48.17                    | OK           |
| 299                      | 49.18                     | 48.41                    | OK           |
| 300                      | 49.28                     | 48.55                    | OK           |
| 301                      | 49.49                     | 48.82                    | OK           |
| 302                      | 50.02                     | 49.48                    | OK           |
| 303                      | 50.61                     | 50.24                    | OK           |
| 304                      | 50.85                     | 50.55                    | OK           |
| 305                      | 50.95                     | 50.67                    | OK           |
| 306                      | 50.99                     | 50.72                    | OK           |
| 307                      | 50.96                     | 50.70                    | OK           |
| 308                      | 50.81                     | 50.53                    | OK           |
| 309                      | 50.51                     | 50.17                    | OK           |
| 310                      | 50.24                     | 49.82                    | OK           |
| 311                      | 50.05                     | 49.59                    | OK           |
| 312                      | 49.72                     | 49.15                    | OK           |
| 313                      | 49.59                     | 48.98                    | OK           |
| 314                      | 49.45                     | 48.80                    | OK           |
| 315                      | 49.39                     | 48.71                    | OK           |
| 316                      | 49.34                     | 48.63                    | OK           |
| 317                      | 49.38                     | 48.67                    | OK           |
| 318                      | 49.45                     | 48.77                    | OK           |
| 319                      | 49.52                     | 48.86                    | OK           |
| 320                      | 49.71                     | 49.10                    | OK           |
| 321                      | 49.98                     | 49.46                    | OK           |
| 322                      | 50.15                     | 49.68                    | OK           |
| 323                      | 50.29                     | 49.86                    | OK           |
| 324                      | 50.45                     | 50.05                    | OK           |
| 325                      | 50.63                     | 50.26                    | OK           |
| 326                      | 50.62                     | 50.29                    | OK           |

| Azimuth<br>(deg) | Main Dist<br>(km) | Aux Dist<br>(km) | Check |
|------------------|-------------------|------------------|-------|
| -----            | -----             | -----            | ----- |
| 327              | 50.31             | 49.93            | OK    |
| 328              | 50.05             | 49.61            | OK    |
| 329              | 49.83             | 49.31            | OK    |
| 330              | 49.77             | 49.22            | OK    |
| 331              | 49.78             | 49.23            | OK    |
| 332              | 49.79             | 49.25            | OK    |
| 333              | 49.75             | 49.20            | OK    |
| 334              | 49.66             | 49.08            | OK    |
| 335              | 49.56             | 48.96            | OK    |
| 336              | 49.52             | 48.87            | OK    |
| 337              | 49.52             | 48.87            | OK    |
| 338              | 49.55             | 48.92            | OK    |
| 339              | 49.55             | 48.92            | OK    |
| 340              | 49.56             | 48.93            | OK    |
| 341              | 49.64             | 49.03            | OK    |
| 342              | 49.71             | 49.13            | OK    |
| 343              | 49.70             | 49.14            | OK    |
| 344              | 49.72             | 49.14            | OK    |
| 345              | 49.76             | 49.19            | OK    |
| 346              | 49.85             | 49.30            | OK    |
| 347              | 49.85             | 49.34            | OK    |
| 348              | 49.74             | 49.20            | OK    |
| 349              | 49.69             | 49.13            | OK    |
| 350              | 49.68             | 49.11            | OK    |
| 351              | 49.75             | 49.18            | OK    |
| 352              | 49.89             | 49.35            | OK    |
| 353              | 50.04             | 49.54            | OK    |
| 354              | 50.14             | 49.65            | OK    |
| 355              | 50.26             | 49.80            | OK    |
| 356              | 50.42             | 50.00            | OK    |
| 357              | 50.57             | 50.19            | OK    |
| 358              | 50.67             | 50.34            | OK    |
| 359              | 50.68             | 50.39            | OK    |