used instead. The result of a distance
calculation under parts 21 and 101 of
this chapter must be rounded to the
nearest tenth of a kilometer. The
method set forth in this paragraph is
considered to be sufficiently accurate
for distances not exceeding 475 km (295
miles).

(a) Convert the latitudes and lon-
gitudes of each reference point from
degree-minute-second format to de-
gree-decimal format by dividing min-
utes by 60 and seconds by 3600, then
adding the results to degrees.

\[
\text{LAT}_{\text{dd}} = \text{DD} + \frac{\text{MM}}{60} + \frac{\text{SS}}{3600}
\]

\[
\text{LON}_{\text{dd}} = \text{DDD} + \frac{\text{MM}}{60} + \frac{\text{SS}}{3600}
\]

(b) Calculate the mean geodetic lati-
tude between the two reference points
by averaging the two latitudes:

\[
\text{ML} = \frac{\text{LAT}_{\text{dd}} + \text{LAT}_{\text{dd}}}{2}
\]

(c) Calculate the number of kilo-
meters per degree latitude difference
for the mean geodetic latitude cal-
culated in paragraph (b) of this section
as follows:

\[
\text{KPD}_{\text{lat}} = 111.13209 - 0.56605 \cos 2\text{ML} + 0.00120 \cos 4\text{ML}
\]

(d) Calculate the number of kilo-
meters per degree of longitude dif-
ference for the mean geodetic latitude
calculated in paragraph (b) of this sec-
tion as follows:

\[
\text{KPD}_{\text{lon}} = 111.41513 \cos 5\text{ML} - 0.09455 \cos 3\text{ML} + 0.00012 \cos 5\text{ML}
\]

(e) Calculate the North-South dis-
tance in kilometers as follows:

\[
\text{NS} = \text{KPD}_{\text{lat}} \times (\text{LAT}_{\text{dd}} - \text{LAT}_{\text{dd}})
\]

(f) Calculate the East-West distance
in kilometers as follows:

\[
\text{EW} = \text{KPD}_{\text{lon}} \times (\text{LON}_{\text{dd}} - \text{LON}_{\text{dd}})
\]

(g) Calculate the distance between
the locations by taking the square root
of the sum of the squares of the East-
West and North-South distances:

\[
\text{DIST} = \sqrt{\text{NS}^2 + \text{EW}^2}
\]

(b) Terms used in this section are de-
defined as follows:

(1) \(\text{LAT}_{\text{dd}}\) and \(\text{LON}_{\text{dd}}\) are the coordi-
nates of the first location in degree-
decimal format.

(2) \(\text{LAT}_{\text{dd}}\) and \(\text{LON}_{\text{dd}}\) are the coordi-
nates of the second location in degree-
decimal format.

(3) ML is the mean geodetic latitude
in degree-decimal format.

(4) KPD_{\text{lat}} is the number of kilometers
per degree of latitude at a given mean
geodetic latitude.

(5) KPD_{\text{lon}} is the number of kilo-
meters per degree of longitude at a
given mean geodetic latitude.

(6) NS is the North-South distance in
kilometers.

(7) EW is the East-West distance in
kilometers.

(8) DIST is the distance between
the two locations, in kilometers.

[70 FR 19306, Apr. 13, 2005]
(b) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).

(c) For locations in Dade and Broward Counties, Florida, the method prescribed above may be used or average terrain elevation may be assumed to be 3 meters (10 feet).

[70 FR 19306, Apr. 13, 2005]

REPORTS TO BE FILED WITH THE COMMISSION

§ 1.981 Reports, annual and semi-annual.

(a) Licensees of stations authorized for developmental operation shall submit a report on the results of the developmental program. The report shall be filed with and made a part of each application for renewal of authorization. The report shall be filed at the Commission’s offices in Washington, DC or alternatively may be sent to the commission electronically via the ULS.

(b) The report shall include comprehensive and detailed information on the following:

(1) The final objective.

(2) Results of operation to date.

(3) Analysis of the results obtained.

(4) Copies of any published reports.

(5) Need for continuation of the program.

(6) Number of hours of operation on each frequency.

(c) Where required by the particular service rules, licensees who have entered into agreements with other persons for the cooperative use of radio station facilities must submit annually an audited financial statement reflecting the nonprofit cost-sharing nature of the arrangement to the Commission’s offices in Washington, DC or alternatively may be sent to the Commission electronically via the ULS, no later than three months after the close of the licensee’s fiscal year.

[63 FR 68935, Dec. 14, 1998]

Subpart G—Schedule of Statutory Charges and Procedures for Payment

SOURCE: 52 FR 5289, Feb. 20, 1987, unless otherwise noted.

§ 1.1101 Authority.

Authority to impose and collect these charges is contained in title III, section 3001 of the Omnibus Budget Reconciliation Act of 1989 (Pub. L. 101–239), revising 47 U.S.C. 158, which directs the Commission to prescribe charges for certain of the regulatory services it provides to many of the communications entities within its jurisdiction. This law revives section 8 of the Communications Act of 1934, as amended, which contains a Schedule of Charges as well as procedures for modifying and collecting these charges.

[55 FR 19155, May 8, 1990]

§ 1.1102 Schedule of charges for applications and other filings in the wireless telecommunications services.

Those services designated with an asterisk in the payment type code column have associated regulatory fees that must be paid at the same time the application fee is paid. Please refer to §1.1152 for the appropriate regulatory fee that must be paid for this service. Remit manual filings and/or payment for these services to the Federal Communications Commission, Wireless Bureau, Applications, P.O. Box 979097, St. Louis, MO 63197–9000.

<table>
<thead>
<tr>
<th>Service</th>
<th>FCC Form No.</th>
<th>Fee amount</th>
<th>Payment type code</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. New; Renewal/Modification</td>
<td>601 &amp; 159</td>
<td>$120.00</td>
<td>PBMR*</td>
</tr>
<tr>
<td>b. Modification; Public Coast CMRS; Non-Profit</td>
<td>601 &amp; 159</td>
<td>$120.00</td>
<td>PBMM</td>
</tr>
<tr>
<td>c. Assignment of Authorization</td>
<td>603 &amp; 159</td>
<td>$120.00</td>
<td>PBMM</td>
</tr>
<tr>
<td>d. Transfer of Control</td>
<td>603 &amp; 159</td>
<td>$60.00</td>
<td>PATM</td>
</tr>
<tr>
<td>e. Spectrum Leasing for Public Coast</td>
<td>608 &amp; 159</td>
<td>$60.00</td>
<td>PATM</td>
</tr>
<tr>
<td>f. Duplicate License</td>
<td>601 &amp; 159</td>
<td>$60.00</td>
<td>PADM</td>
</tr>
<tr>
<td>g. Special Temporary Authority</td>
<td>601 &amp; 159</td>
<td>$175.00</td>
<td>PCMM</td>
</tr>
<tr>
<td>h. Renewal Only</td>
<td>601 &amp; 159</td>
<td>$120.00</td>
<td>PBMR*</td>
</tr>
<tr>
<td>i. Renewal Only (Non-Profit, CMRS)</td>
<td>601 &amp; 159</td>
<td>$120.00</td>
<td>PBMM</td>
</tr>
<tr>
<td>j. Renewal (Electronic Filing) Non-profit, CMRS</td>
<td>601 &amp; 159</td>
<td>$120.00</td>
<td>PBMM</td>
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</tbody>
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