

Section 74.1204 Interference Analysis
K224CJ, Phoenix, AZ
June, 2015

By means of this Application, the Applicant proposes to increase the K224CJ Effective Radiated Power (ERP) from its licensed value of 10 watts (non-directional) to 250 watts ERP (DA-MAX). Further, the FM translator station will change its associated primary station; it will rebroadcast the HD-2 signal of full-service FM station KDKB(FM), Mesa, AZ (Facility ID 41299). No further changes are proposed herein. As discussed below, the instant proposal remains compliant with the protection requirements set forth in Section 74.1204 of the FCC Rules.

Section 74.1204(a) Contour Overlap Protection Criteria

Attached are two maps which demonstrate that proposed technical facility complies with the contour overlap provisions of Section 74.1204(a) of the FCC Rules with respect to all pertinent cochannel (See Exhibit 1) and first-adjacent channel (See Exhibit 2) assignments, authorizations and applications. Except as noted below, the instant proposal is well clear of all other relevant protection considerations not represented herein.

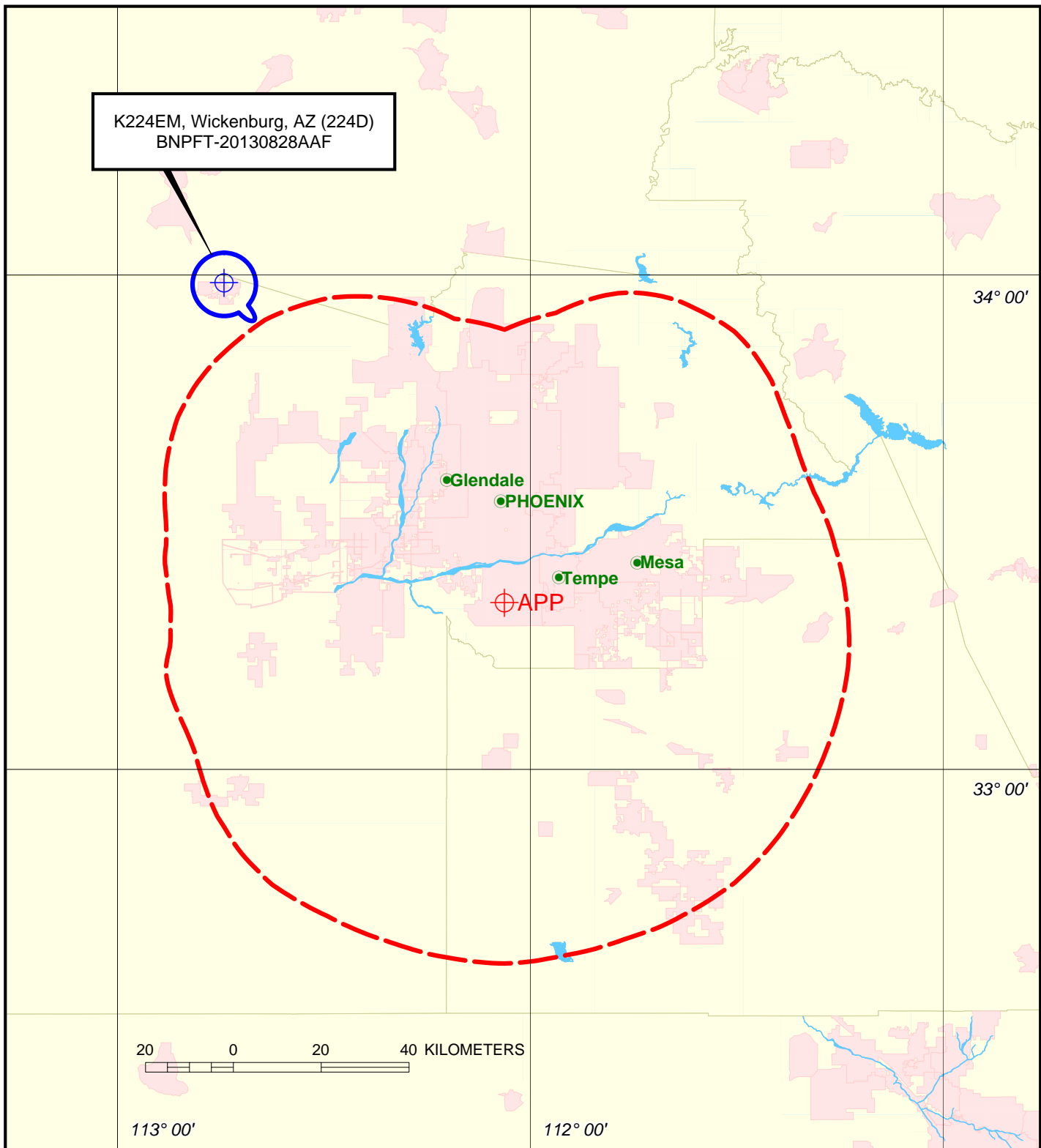
Section 74.1204(d) Second/Third-Adjacent Channel Protection

The K224CJ transmitting antenna remains within the protected contour of second-adjacent channel, full service station KTAR-FM, Glendale, AZ (Channel 222C) and third-adjacent channel full service station KDKB(FM), Mesa, AZ (Channel 227C). The translator's proposed interfering contour remains wholly within the protected contours of each of these stations resulting in contour overlap as defined in Section 74.1204 of the FCC Rules.

At the K224CJ transmitter site, KTAR-FM is predicted to produce an F(50,50) signal strength of 142 dBu. Therefore, in the vicinity of the second-adjacent channel translator station, the translator's relevant interfering contour is the 182 dBu contour. Similarly, KDKB is predicted to produce an F(50,50) signal strength of 155 dBu. Therefore, in the vicinity of the third-adjacent channel translator station, the translator's relevant interfering contour is the 195 dBu contour relative to KDKB. According to free space calculations, the translator's predicted interfering contours will extend less than 0.1 meter from the K224CJ antenna and neither reach ground level nor reach any people. Therefore, the proposed minor change will cause no interference to any population presently served by either affected station.

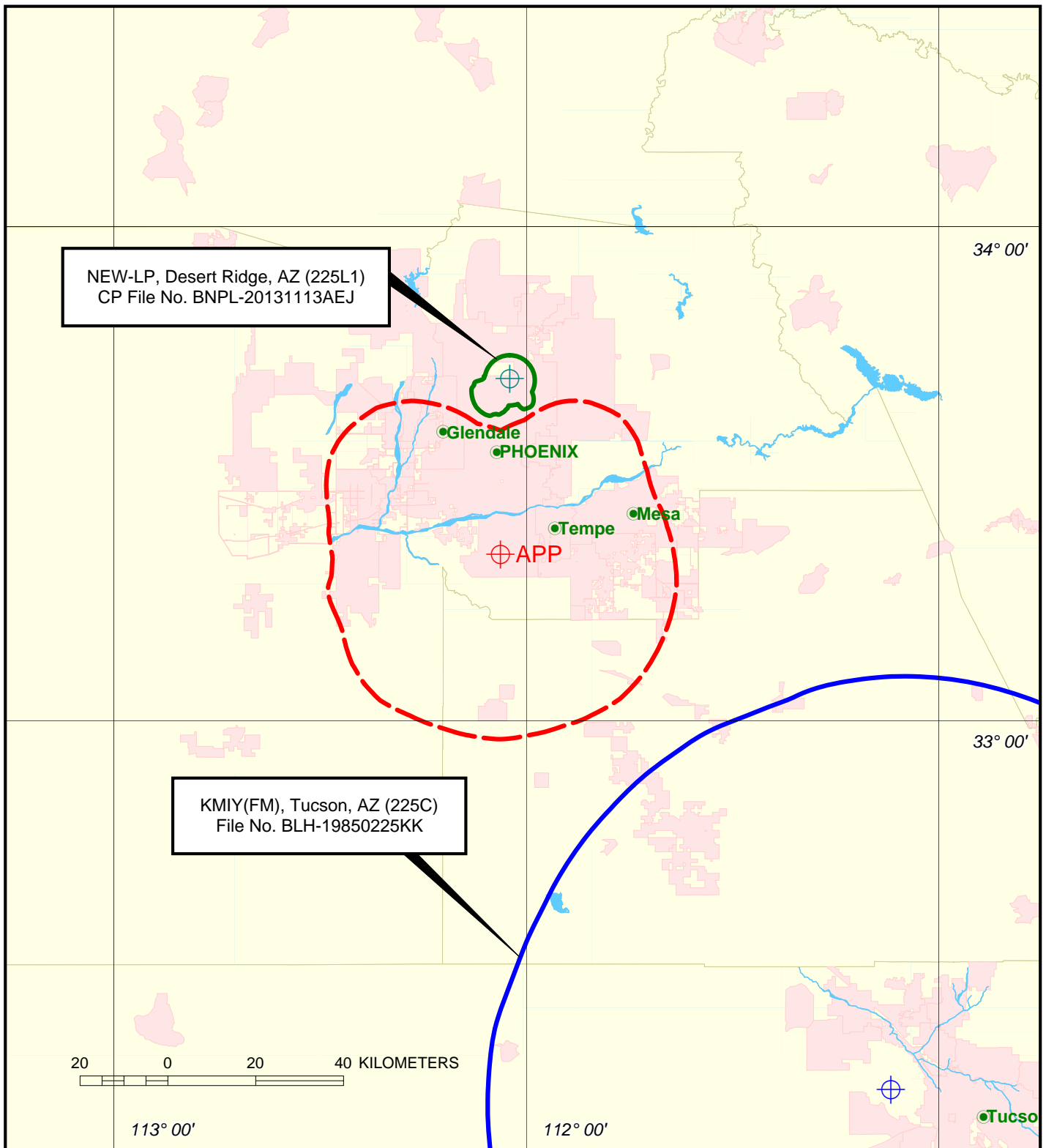
Accordingly, the proposed facility satisfies Section 74.1204(d) of the FCC Rules because it has been "demonstrated that no actual interference will occur due to lack of population or such other factors as may be applicable".

Cochannel Station Protected Contours: 60 dBu F(50,50) - Solid Contours
 Proposed Translator Interfering Contour: 40 dBu F(50,10) - Dashed Contour



CO-CHANNEL SECTION 74.1204
 CONTOUR OVERLAP STUDY
 K224CJ, PHOENIX, AZ
 CH. 224D, 250 watts (DA-MAX), 446 m HAAT
 JUNE, 2015

Cochannel Station Protected Contours: 60 dBu F(50,50) - Solid Contours
 Proposed Translator Interfering Contour: 54 dBu F(50,10) - Dashed Contour



FIRST ADJACENT CHANNEL
 SECTION 74.1204 CONTOUR OVERLAP STUDY
 K224CJ, PHOENIX, AZ
 CH. 224D, 250 watts (DA-MAX), 446 m HAAT
 JUNE, 2015