

**FM Translator Frequency Displacement Statement  
And Section 74.1204 Interference Analysis  
K265CI to Channel 280D, Prescott, AZ**

FM translator station K265CI, Prescott, AZ, currently operates on Channel 265D (100.9 MHz) with an Effective Radiated Power of 90 watts (horizontal polarization, DA-MAX). The K265CI translator station was originally licensed in 1977, and has provided service to the Prescott area for the past 37+ years.

From 1998 to 2012, first-adjacent channel full-service FM station KNRJ(FM) operated on Channel 266 (101.1 MHz) as a Class C1 facility licensed to Payson, AZ, from a transmitter site located 95.1 kilometers from K265CI. In March, 2012, KNRJ(FM) began program tests from a new transmitter site only 33.5 km from K265CI, in order to serve its new community of license, Cordes Lakes, as an upgraded Class C facility (See FCC License File No. BLH-20120321AET).

As shown on the attached map labeled Exhibit 1, the FM translator's transmitter site is now *within* the KNRJ(FM) protected contour and the FM translator is causing some degree of first-adjacent channel interference to regular KNRJ(FM) listeners in and around Prescott, AZ. Further, the modified KNRJ(FM) first-adjacent channel operation has severely impacted the long-established service area of K265CI.

Accordingly, the Applicant proposes herein to change the frequency of the translator station to mitigate any perceived interference to KNRJ(FM) and to maintain its expected and established service to the public.

Initially, the frequency search was limited to the three upper adjacent channels, the three lower adjacent channels in order to propose the new frequency as a minor channel change for K265CI as defined in Section 74.1233 of the FCC Rules.<sup>1</sup> Unfortunately, all of these prospective channels are precluded by existing full-service stations and/or currently pending applications for new FM translator stations as noted below:

FM Channel	Primary Preclusion	Secondary Preclusion
262	NEW-CP, BNPL-20131115ACD (263L1)	None
263	NEW-CP, BNPL-20131115ACD (263L1)	KZRJ-LP, Jerome, AZ (263L1)
264	NEW-CP, BNPL-20131115ACD (263L1)	None
266	KNRJ, Cordes Lakes, AZ (266C)	None
267	KNRJ, Cordes Lakes, AZ (266C)	None
268	K269EE, Prescott, AZ (269D)	None

With no adjacent channels available, the frequency search was extended to the entire non-reserved frequency band. The expanded frequency search revealed that Channel 280D (103.9 MHz) was most suitable for the translator station. Therefore, the

<sup>1</sup> The intermediate frequency (I.F.) related channels fall in the reserved band. Consequently, the I.F. related channels are not eligible as a possible minor change frequency alternative.

Applicant proposes herein to change frequency to Channel 280D. The Applicant recognizes that the proposed channel change would normally be considered a major change. However, because the existing translator operation is being displaced by a full-service station and because no adjacent channels are suitable, the Applicant requests a waiver of Section 74.1233 of the Rules and requests that the proposed frequency change be considered a minor change application.

On the new channel, the translator's present transmitter site would be located within the protected contour of second-adjacent channel, full service station KAJM(FM), Camp Verde, AZ (Channel 282C). Consequently, the translator's proposed interfering contour is located with KAJM protected contour resulting in contour overlap as defined in Section 74.1204 of the FCC Rules. The only other protection consideration which requires closer study for compliance with the contour overlap provisions of Section 74.1204 is second-adjacent channel full-service station KLNZ(FM), Glendale, AZ (Channel 278C). As shown on Exhibit 2, the proposed K265CI (Channel 280) interfering contour does not overlap the KLNZ(FM) protected contour in accordance with Section 74.1204 of the FCC Rules. Further, the proposed translator facility would cause no overlap to any other authorized or proposed facility not specifically referenced herein.

With respect to KAJM(FM), at the translator's existing transmitter site, KAJM is predicted to produce an F(50,50) signal strength of 82 dBu. Therefore, in the vicinity of the second-adjacent channel translator station, the translator's relevant interfering contour is the 122 dBu contour. According to free space calculations, the translator's predicted 122 dBu contour will extend only 87.7 meters from the translator's transmitter site. Exhibit 3 (attached) is a satellite map which depicts the translator's transmitter site and the surrounding vicinity.

As demonstrated on Exhibit 3, the translator station is located atop Mt. Francis in a remote area southwest of Prescott. There are no housing units and no population in the vicinity of the transmitter site or within the worst-case 122 dBu interfering contour depicted on Exhibit 3. Therefore, the proposed channel change will cause no interference to any population presently served by KAJM.

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".

K265CI.LICENSE

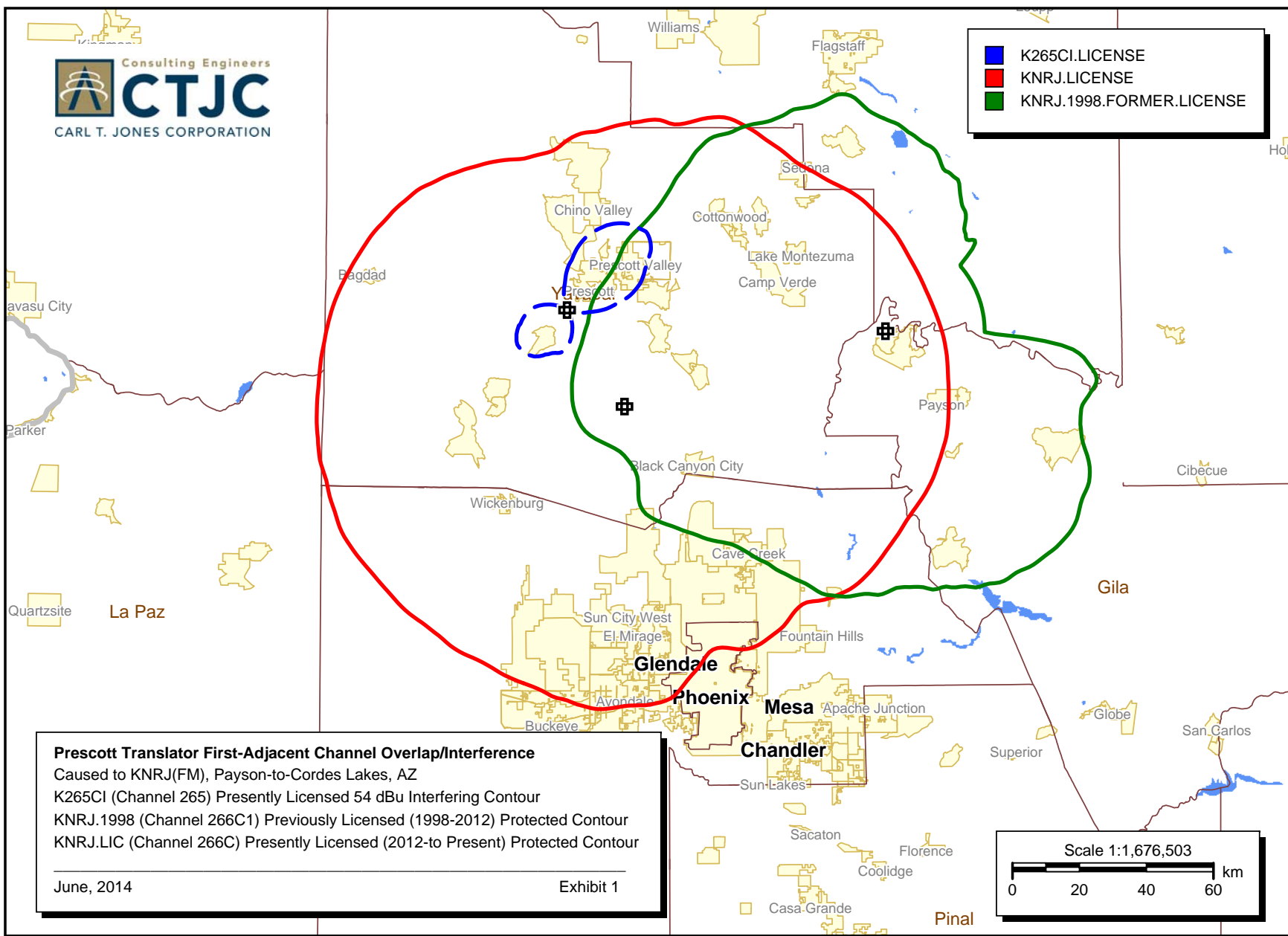
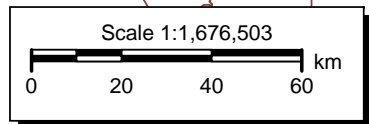
KNRJ.LICENSE

KNRJ.1998.FORMER.LICENSE

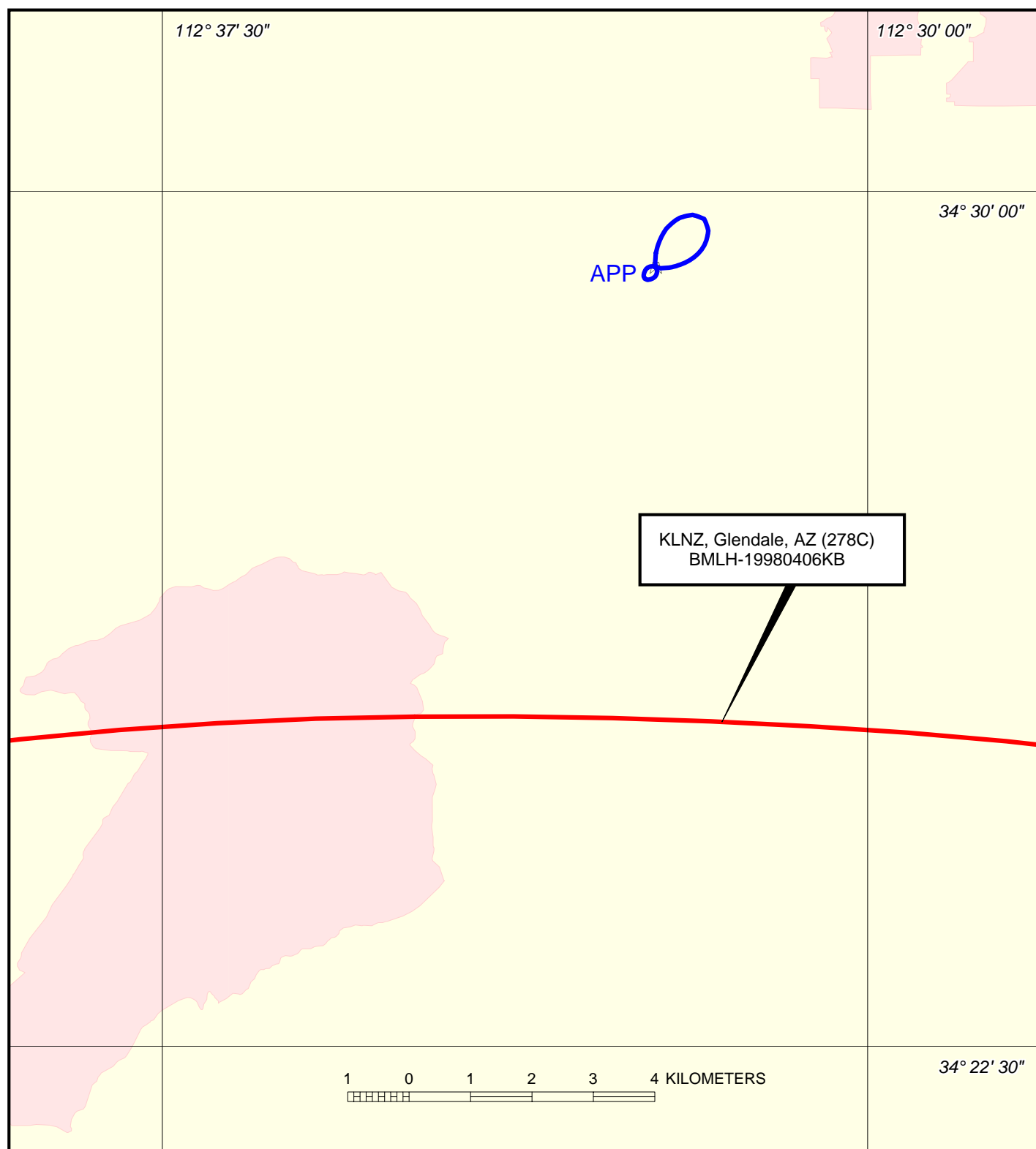
**Prescott Translator First-Adjacent Channel Overlap/Interference**  
 Caused to KNRJ(FM), Payson-to-Cordes Lakes, AZ  
 K265CI (Channel 265) Presently Licensed 54 dBu Interfering Contour  
 KNRJ.1998 (Channel 266C1) Previously Licensed (1998-2012) Protected Contour  
 KNRJ.LIC (Channel 266C) Presently Licensed (2012-to Present) Protected Contour

June, 2014

Exhibit 1



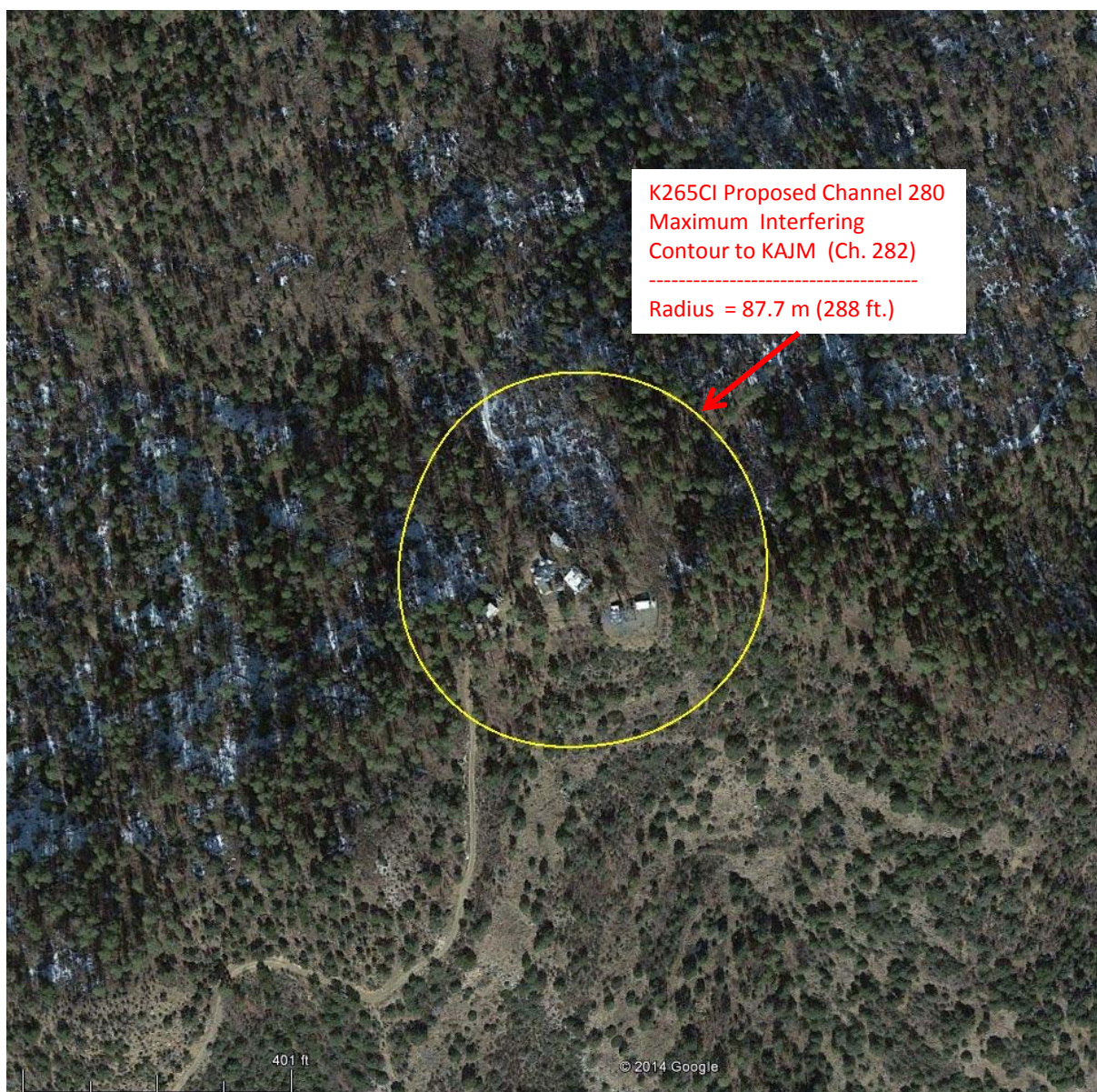
Full Service Protected Contours: 60 dBu F(50,50) - RED Contour  
 Proposed Translator Interfering Contour: 100 dBu F(50,10) - BLUE Contour



SECOND/THIRD-ADJACENT CHANNEL SECTION 74.1204  
 FM TRANSLATOR VS. FULL SERVICE FM  
 CONTOUR OVERLAP STUDY  
 K265CI, PRESCOTT, AZ  
 CH. 280D, 250 watts (DA), 440 m HAAT  
 JUNE, 2014



As demonstrated below, there are no inhabited buildings or major roadways within the predicted interference area.



KAJM(FM) Camp Verde, AZ  
Ch. 282C, 40 kW ERP, 807 m HAAT  
FCC File No. BMLH-20120321AES



Worst-Case K265CI Interfering Contour  
to Second-Adjacent Channel Station KAJM(FM)  
Fill-in FM Translator Station K265CI, Prescott, AZ  
LIC: Ch. 265D, 90 watts (DA-MAX), 440 m HAAT  
APP: Ch. 280D, 250 watts (DA-MAX), 440 m HAAT  
June, 2014