

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
LPTV STATION KKHD-LP
GRAND JUNCTION, COLORADO

April 10, 2007

CHANNEL 20z 20.4 KW (MAX-DA)

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Technical Statement

This Technical Exhibit was prepared in support of an application for construction permit for LPTV station KKHD-LP to relocate its transmitter site. KKHD-LP is licensed for operation at a transmitter site located on Black Ridge, southwest of Grand Junction. See FCC File No. BLTTL-20060901ACP. The transmitter site will be re-located to the existing KJCT-TV/DT (Grand Junction, CO, Channel 7 analog and Channel 8 digital) transmitter site on Grand Mesa located east of Grand Junction. This application is classified as a minor change. See 74 dBu coverage comparison at Figure 1 herein.

Proposed Facilities

It is proposed to operate on Channel 20 (506-512 MHz) with a "zero" carrier frequency offset using the same directional antenna as now licensed for KKHD-LP, but re-oriented with boresight at 270°True. The maximum directional ERP will be 20.4 kW at the radio horizon and 40.5 kW. The antenna radiation center height above ground is proposed to be 23 m, with a radiation center height above mean sea level of 3047 m.

TV Broadcast Analog Protection

An allocation study has been conducted pursuant to the provisions of Section 74.705 of the FCC Rules. The proposed facility meets the contour overlap and spacing requirements with respect to all pertinent facilities.

DTV Station Protection

Calculations based on OET-69 indicate that the proposed KKHD-LP operation on Channel 20 complies with the FCC's 0.5% interference threshold criteria to all authorized DTV operating facilities on Channels 19, 20 and 21. Figure 2 provides the output of study based on OET-69, which demonstrates that the proposed KKHD-LP operation complies with the FCC's DTV interference protection criteria.

LPTV/TV Translator/Class A TV Protection

An allocation study was conducted pursuant to the provisions of Section 74.707 of the FCC Rules. Calculations based on OET-69 indicate that the proposed KKHD-LP operation on Channel 20 complies with the FCC's 0.5% interference threshold criteria to all pertinent facilities. Figure 2 provides the output of study based on OET-69, which demonstrates that the proposed KKHD-LP operation complies with the FCC's interference protection criteria.

Environmental Considerations

An evaluation was conducted for the proposed facility concerning compliance with Section 1.1307(b) of the FCC Rules regarding human exposure to radio frequency (RF) energy.*

There are other broadcast facilities to be located on the tower or within close proximity of the tower site. Preliminary calculations indicate that the proposed facility may exceed the 5% MPE exclusion level for certain points on the ground in the vicinity of the proposed transmitter site. Therefore, the applicant shall conduct RF power density measurements throughout the transmitter site area to confirm compliance with the FCC specified guidelines for human exposure to RF energy.

The transmitter site is to be restricted from access. In the event that personnel are required to enter the restricted area or climb the tower structure, the proposed transmissions shall be reduced or terminated as necessary to prevent RF exposure above the FCC recommended limits.

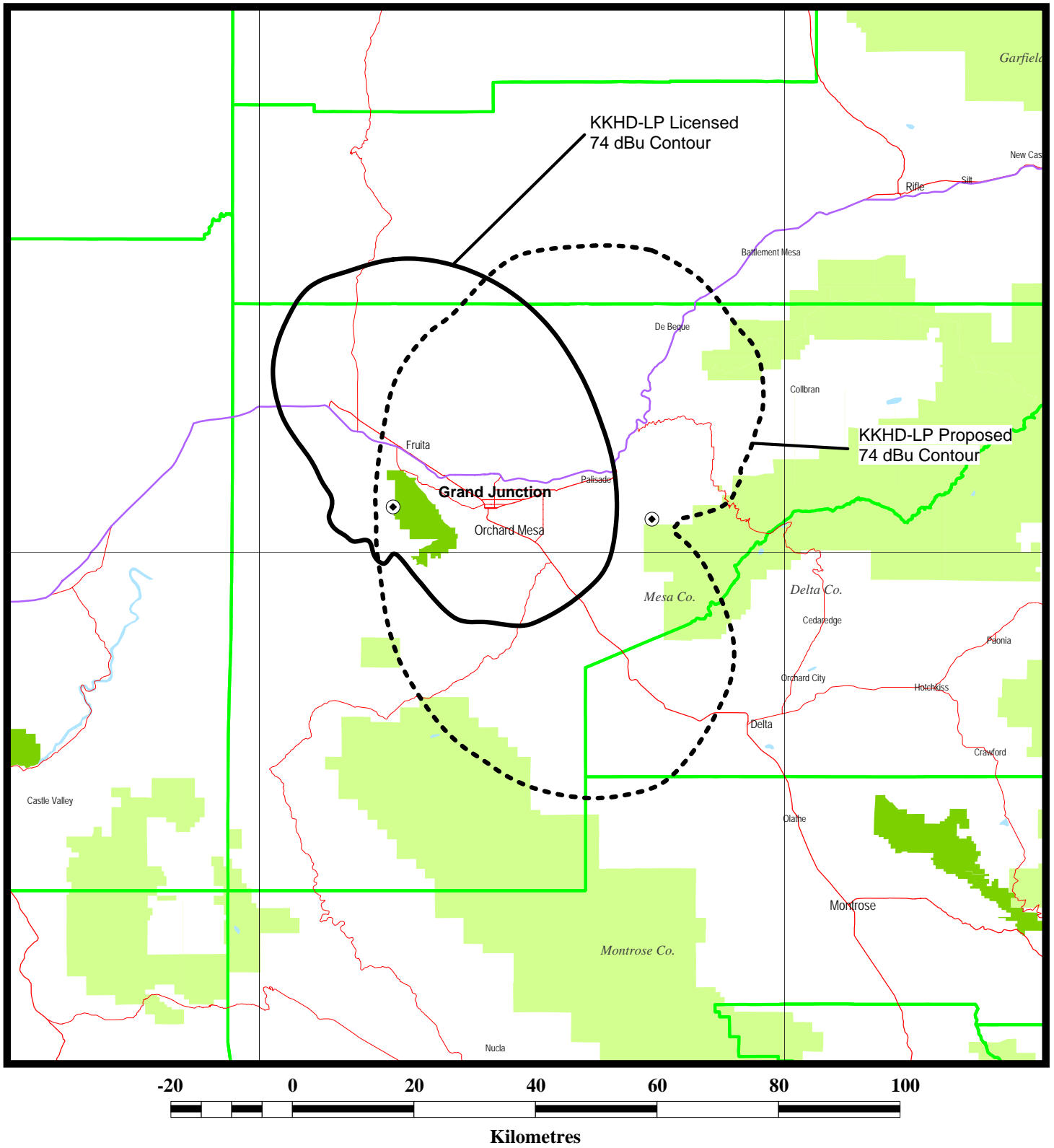


Louis R. du Treil, Jr.

du Treil, Lundin & Rackley, Inc.
201 Fletcher Ave.
Sarasota, FL 34237

April 10, 2007

* See FCC Office of Engineering and Technology Bulletin No. 56 for background information on non-ionizing RF energy of the type discussed here. Internet web reference:
http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf



PREDICTED COVERAGE CONTOURS

duTreil, Lundin & Rackley, Inc. Sarasota, Florida

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OET-69 Interference Analysis

Census data selected: 1990
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Record Selected for Analysis

KKHDLP USERRECORD-01 GRAND JUNCTION CO US
Channel 20 ERP 20.4 kW HAAT 1432. m RCAMSL 03047 m
Latitude 039-02-55 Longitude 0108-15-06
Status APP Zone 2 Border Offset Z
Dir Antenna Make CDB Model 00000000072251 Beam tilt N Ref Azimuth 270.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	74.0 dBu F(50,50) (km)
0.0	16.159	1032.3	44.0
45.0	1.898	765.1	25.7
90.0	0.987	33.0	4.7
135.0	1.657	230.4	13.8
180.0	16.159	1037.7	44.1
225.0	17.834	1361.4	48.6
270.0	10.871	1431.7	45.4
315.0	17.834	1213.4	47.0

Contour Overlap Evaluation from LPTV Station to Full Service TV & DTV

Contour overlap to station
KRMU 20 DURANGO CO BNPEDT 20050414ACG

Contour overlap to station
KRMU 20 DURANGO CO BLEDT 20041012AIM

Contour Overlap Evaluation from LPTV to Full Service TV & DTV Complete

Contour Overlap Evaluation from LPTV Station to LPTV Stations

Contour overlap to station
K20JH-D 20 RIFLE, ETC. CO BDCCDTT 20061030ADN

Contour overlap to station
NEW 20 MOAB UT BNPTTL 20000828AFZ

Contour overlap to station
NEW 20 MOAB UT BNPTTL 20000828APW

Contour overlap to station
K20GP 20 ORANGEVILLE UT BLTT 20030806ABH

Contour Overlap Evaluation from LPTV to LPTV Stations Complete

Contour Overlap to Proposed Station

NEW Station
20 MOAB UT BNPTTL20000828AFZ causes

Contour overlap to station
KKHDLP 20 GRAND JUNCTION CO USERRECORD01

NEW Station
20 MOAB UT BNPTTL20000828APW causes

Contour overlap to station
KKHDLP 20 GRAND JUNCTION CO USERRECORD01

NEW Station
35 GRAND JUNCTION CO BNPTTL20000829AWX

Is inside contour of station
KKHDLP 20 GRAND JUNCTION CO USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	City/State	ARN
20	KKHDLP	GRAND JUNCTION CO	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	KRMU	DURANGO CO	200.9	CP MOD	BMPEDT	-20050414ACG
20	KRMU	DURANGO CO	200.9	LIC	BLEDT	-20041012AIM
20	K20JH-D	RIFLE, ETC. CO	60.1	CP	BDCCDTT	-20061030ADN
20	NEW	MOAB UT	126.0	APP	BNPTTL	-20000828AFZ
20	NEW	MOAB UT	126.0	APP	BNPTTL	-20000828APW
20	K20GP	ORANGEVILLE UT	249.8	LIC	BLTT	-20030806ABH

%%%

Analysis of Interference to Affected Station 1

Channel	Call	City/State	Application	Ref. No.
20	KRMU	DURANGO CO	BMPEDT	-20050414ACG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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20	KTVD	DENVER CO	359.3	CP	BPCT	-20020813ABA
20	KKHDLP	GRAND JUNCTION CO	200.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	KRMU	DURANGO CO	BLEDT -20041012AIM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
20	KTVD	DENVER CO	359.3	CP	BPCT -20020813ABA
20	KKHDLP	GRAND JUNCTION CO	200.9	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	K20JH-D	RIFLE, ETC. CO	BDCCDTT -20061030ADN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
20	KTVD	DENVER CO	233.6	CP	BPCT -20020813ABA
20	KRMU	DURANGO CO	252.7	CP MOD	BMPEDT -20050414ACG
20	KRMU	DURANGO CO	252.7	LIC	BLEDT -20041012AIM
20	KTMW	SALT LAKE CITY UT	382.3	CP MOD	BMPCT -19990308KF
20	KFNB	CASPER WY	382.0	LIC	BLCT -19950928KF
20	KKHDLP	GRAND JUNCTION CO	60.1	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	NEW	MOAB UT	BNPTTL -20000828AFZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	KRMJ	GRAND JUNCTION CO	96.0	LIC	BLEDT -20060630ABE
17	KRMJ-DT	GRAND JUNCTION CO	126.2	PLN	DTVPLN -DTVP0253
20	KTVD	DENVER CO	392.0	CP	BPCT -20020813ABA
20	KRMU	DURANGO CO	184.0	CP MOD	BMPEDT -20050414ACG
20	KRMU	DURANGO CO	184.0	LIC	BLEDT -20041012AIM
20	KKHD-LP	GRAND JUNCTION CO	96.0	LIC	BLTTTL -20060901ACP
20	K20GE	GARFIELD, ETC. UT	230.2	LIC	BLTT -20030903ACA
20	NEW	MOAB UT	0.0	APP	BNPTTL -20000828APW
20	K20GP	ORANGEVILLE UT	173.7	LIC	BLTT -20030806ABH
20	KTMW	SALT LAKE CITY UT	345.8	CP MOD	BMPCT -19990308KF
20	KKHDLP	GRAND JUNCTION CO	126.0	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	NEW	MOAB UT	BNPTTL -20000828APW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	KRMJ	GRAND JUNCTION CO	96.0	LIC	BLEDT -20060630ABE
17	KRMJ-DT	GRAND JUNCTION CO	126.2	PLN	DTVPLN -DTVP0253

20	KTVD	DENVER CO	392.0	CP	BPCT	-20020813ABA
20	KRMU	DURANGO CO	184.0	CP MOD	BMPEDT	-20050414ACG
20	KRMU	DURANGO CO	184.0	LIC	BLEDT	-20041012AIM
20	KKHD-LP	GRAND JUNCTION CO	96.0	LIC	BLTTTL	-20060901ACP
20	K20GE	GARFIELD, ETC. UT	230.2	LIC	BLTT	-20030903ACA
20	NEW	MOAB UT	0.0	APP	BNPTTL	-20000828AFZ
20	K20GP	ORANGEVILLE UT	173.7	LIC	BLTT	-20030806ABH
20	KTMW	SALT LAKE CITY UT	345.8	CP MOD	BMPCT	-19990308KF
20	KKHDLP	GRAND JUNCTION CO	126.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	K20GP	ORANGEVILLE UT	BLTT -20030806ABH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	KZAR-DT	PROVO UT	97.3	PLN	DTVPLN -DTV0284
19	K19GK-D	EMERY UT	31.3	CP	BDCCDTT -20061003AAK
19	K18DF	PRICE UT	36.4	LIC	BLTTTL -20030808ABV
19	KUES	RICHFIELD UT	101.9	LIC	BLEDT -20030429AAT
20	KRMU	DURANGO CO	356.3	CP MOD	BMPEDT -20050414ACG
20	KRMU	DURANGO CO	356.3	LIC	BLEDT -20041012AIM
20	KKHD-LP	GRAND JUNCTION CO	207.2	LIC	BLTTTL -20060901ACP
20	NEW	CEDAR CITY UT	232.5	APP	BNPTTL -20000831EBK
20	K20GE	GARFIELD, ETC. UT	110.0	LIC	BLTT -20030903ACA
20	K20DW-D	JUAB UT	66.7	LIC	BLDTT -20061107AER
20	NEW	MAYFIELD UT	52.3	APP	BSFDDT -20060630CWH
20	NEW	MOAB UT	173.7	APP	BNPTTL -20000828AFZ
20	NEW	MOAB UT	173.7	APP	BNPTTL -20000828APW
20	K10CT	SALINA UT	73.4	APP	BSTA -20060127AAL
20	KTMW	SALT LAKE CITY UT	184.1	CP MOD	BMPCT -19990308KF
20	K20JA-D	SIGURD & SALINA UT	73.4	CP	BDCCDTT -20061010ACL
20	K20ER	TOOELE UT	184.7	LIC	BLTT -19950710IE
21	K21HZ-D	EMERY UT	31.3	CP	BDCCDTT -20061003AAQ
35	K35DW	EMERY UT	31.3	LIC	BLTT -19950202IF
35	K35CK	PRICE UT	36.4	LIC	BLTT -19900518IT
20	KKHDLP	GRAND JUNCTION CO	249.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	KKHDLP	GRAND JUNCTION CO	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	KRMJ	GRAND JUNCTION CO	42.6	LIC	BLEDT -20060630ABE
17	KRMJ-DT	GRAND JUNCTION CO	0.6	PLN	DTVPLN -DTV0253
20	KTVD	DENVER CO	270.3	CP	BPCT -20020813ABA
20	KRMU	DURANGO CO	200.9	CP MOD	BMPEDT -20050414ACG
20	KRMU	DURANGO CO	200.9	LIC	BLEDT -20041012AIM
20	K20JH-D	RIFLE, ETC. CO	60.1	CP	BDCCDTT -20061030ADN
20	K20HR	THOMASVILLE CO	139.3	LIC	BLTT -20060605ABN
20	NEW	MOAB UT	126.0	APP	BNPTTL -20000828AFZ
20	NEW	MOAB UT	126.0	APP	BNPTTL -20000828APW
20	K20GP	ORANGEVILLE UT	249.8	LIC	BLTT -20030806ABH
20	KTMW	SALT LAKE CITY UT	381.3	CP MOD	BMPCT -19990308KF
23	KREG-DT	GLENWOOD SPRINGS CO	86.5	PLN	DTVPLN -DTV0515
35	K35HK	CRYSTAL, ETC. CO	86.2	LIC	BLTT -20041104AUF
35	NEW	GRAND JUNCTION CO	42.6	APP	BNPTTL -20000829AWX

Total scenarios = 2

Result key: 1
Scenario 1 Affected station
Before Analysis

7 KKHDLP

Results for: 20N CO GRAND JUNCTION USERRECORD01 APP

	POPULATION	AREA (sq km)	
within Noise Limited Contour	96528	6372.1	
not affected by terrain losses	91220	5376.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 1

Result key: 2
 Scenario 2 Affected station 7 KKHDLP
 Before Analysis

Results for: 20N CO GRAND JUNCTION USERRECORD01 APP

	POPULATION	AREA (sq km)	
within Noise Limited Contour	96528	6372.1	
not affected by terrain losses	91220	5376.1	
lost to NTSC IX	1687	64.7	
lost to additional IX by ATV	0	0.0	
lost to all IX	1687	64.7	

Potential Interfering Stations Included in above Scenario 2

35N CO GRAND JUNCTION BNPTTL 20000829AWX APP

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