

**"LIGHTHOUSE MODEL"
TRANSITION FROM ATSC 1.0 TO
ATSC 3.0
IN TUCSON, AZ ON MAY 23, 2024
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Web location for this
presentation:

<http://aztcs.apcug.org>

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"Meeting Notes"

SUMMARY

The FCC has mandated that all existing ATSC 1.0 television channels that wish to upgrade to ATSC 3.0 are required to run both the existing ATSC 1.0 and new corresponding ATSC 3.0 channels until July 17, 2027. This cost-effective scheme to run both channels simultaneously is called "Lighthouse Model" transition.

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FCC'S SIMULCAST MANDATE

- <https://docs.fcc.gov/public/attachments/FCC-23-53A1.pdf>

FCC'S SIMULCAST MANDATE (continued)

- https://www.atsc.org/wp-content/uploads/2020/10/f-36-26-13322575_PAu3M4S9_WhitePaper_Lighthouse_TESTTREE_v2.pdf

Virtual "Displayed" Channels Prior to Lighthouse Transition in Tucson on May 23, 2024

KMSB
(RF CH. 25)

ATSC 1.0

KHRR
(RF CH. 16)



ATSC 1.0

KUAT-TV
(RF CH. 30)
KUAS-TV
(RF CH. 28)

ATSC 1.0

KVOA
(RF CH. 23)



ATSC 1.0

KOLD
(RF CH. 32)

13.1 (ATSC1)
= "KOLD DT"
= "CBS"

13.2 (ATSC1)
= "MeTV"

13.3 (ATSC1)
= "Oatlaw"

13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

13.5 (ATSC1)
= "KPHE-LD"

13.6 (ATSC1)
= "CHARGE!"

11.1 (ATSC1)
= "KMSB-HD"

11.2 (ATSC1)
= "Quest"

11.3 (ATSC1)
= "True Crime Network"

11.4 (ATSC1)
= "Nosey"

11.5 (ATSC1)
= "Shop LC"

11.6 (ATSC1)
= "?????"

11.7 (ATSC1)
= "Comet"

11.8 (ATSC1)
= "QVC"

6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

4.1 (ATSC1)
= "KVOANBC"
= "NBC"

4.2 (ATSC 1)
= "COZI TV"

4.3 (ATSC1)
= "Ion Mystery"

4.4 (ATSC1)
= "DABL"
= "This TV"

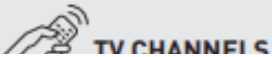
4.5 (ATSC1)
= "Grit"

40.1 (ATSC1)
= "KHRR-DT"
= "Telemundo"

40.2 (ATSC1)
= "TeleXitos"

40.3 (ATSC1)
= "NBC LX"

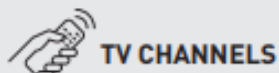
40.4 (ATSC1)
= "Oxygen"



Lighthouse

Relocation of ATSC 1.0 Virtual Displayed Channels of the Lighthouse Station to Existing ATSC 1.0 TV Stations in Tucson on May 23, 20

**KHRR
(RF CH. 16)**



40.1 (ATSC1)
="KHRR-DT"
="Telemundo"

40.2 (ATSC1)
="TeleXitos"

40.3 (ATSC1)
="NBC LX"

40.4 (ATSC1)
="Oxygen"

**KUAT-TV
(RF CH. 30)
KUAS-TV
(RF CH. 28)**



6.1 (ATSC1)
27.1 (ATSC1)
="PBS HD"

6.2 (ATSC1)
27.2 (ATSC1)
="PBS
KIDS"

6.3 (ATSC1)
27.3 (ATSC1)
="PBS 6
PLUS"

**KVOA
(RF CH. 23)**



4.1 (ATSC1)
="KVOA NBC"
="NBC"

4.2 (ATSC 1)
="COZI TV"

4.3 (ATSC1)
=" Ion Mystery"

4.4 (ATSC1)
="DABL"
="This TV"

4.5 (ATSC1)
="Grit"

**KOLD
(RF CH. 32)**



13.1 (ATSC1)
="KOLD DT"
="CBS"

13.2 (ATSC1)
="MeTV"

13.3 (ATSC1)
="Oatlaw"

13.4 (ATSC1)
="KOLDDT4"
="Defy TV"

13.5 (ATSC1)
="KPHE-LD"

13.6 (ATSC1)
="CHARGE!"

**KMSB
(RF CH. 25)**

11.1 (ATSC1)
="KMSB-HD"

11.2 (ATSC1)
="Quest"

11.3 (ATSC1)
="True Crime
Network"

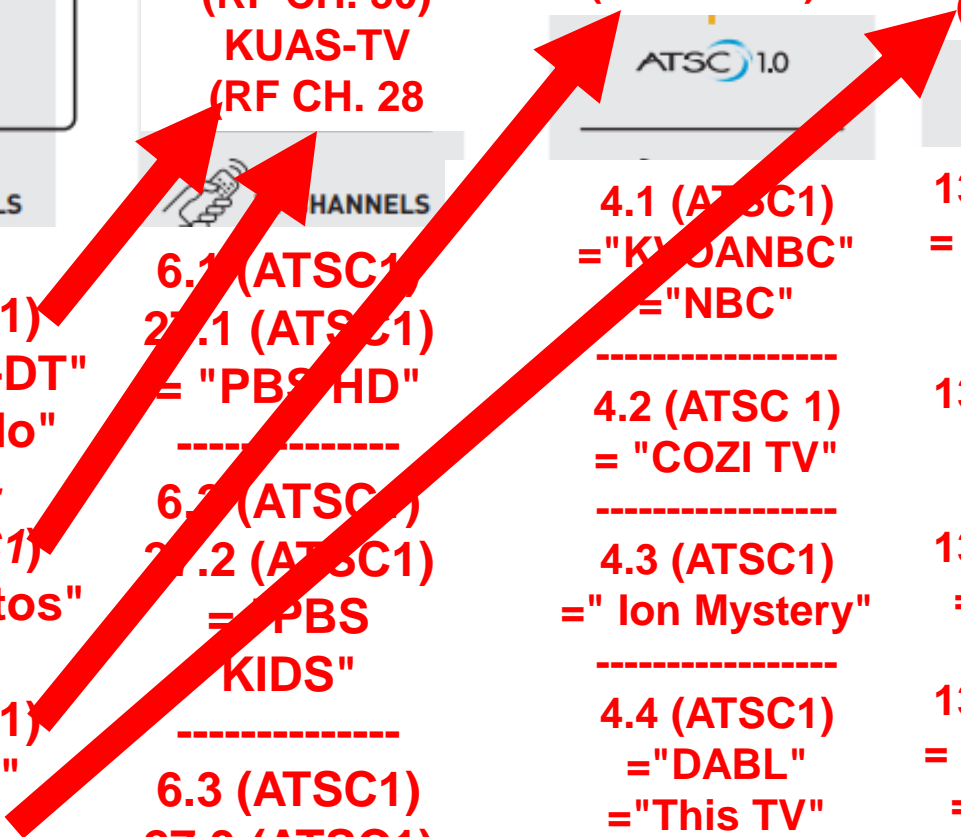
11.4 (ATSC1)
="Nosey"

11.5 (ATSC1)
="Shop LC"

11.6 (ATSC1)
="?????"

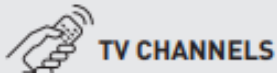
11.7 (ATSC1)
="Comet"

11.8 (ATSC1)
="QVC"



Lighthouse

KHRR
(RF CH. 16)



Relocation of ATSC 1.0 Virtual Displayed Channels of the Lighthouse Station to Existing ATSC 1.0 TV Stations in Tucson on May 23, 2024 (continued)

KUAT-TV
(RF CH. 30)
KUAS-TV
(RF CH. 28)

KVOA
(RF CH. 23)



KOLD
(RF CH. 32)

KMSB
(RF CH. 25)

6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

4.1 (ATSC1)
= "KVOANBC"
= "NBC"

13.1 (ATSC1)
= "KOLD DT"
= "CBS"

11.1 (ATSC1)
= "KMSB-HD"

6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

4.2 (ATSC 1)
= "COZI TV"

13.2 (ATSC1)
= "MeTV"

11.2 (ATSC1)
= "Quest"

6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

4.3 (ATSC1)
= "Ion Mystery"

13.3 (ATSC1)
= "Oatlaw"

11.3 (ATSC1)
= "True Crime Network"

40.1 (ATSC1)
= "KHRR-DT"
= "Telemundo"

4.4 (ATSC1)
= "DABL"
= "This TV"

13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

11.4 (ATSC1)
= "Nosey"

~~40.3 (ATSC1)~~
~~= "NBC LX"~~

4.5 (ATSC1)
= "Grit"

13.5 (ATSC1)
= "KPHE-LD"

11.5 (ATSC1)
= "Shop LC"

~~40.4 (ATSC1)~~
~~= "Oxygen"~~

40.3 (ATSC1)
= "NBC LX"

13.6 (ATSC1)
= "CHARGE!"

11.6 (ATSC1)
= "?????"

40.2 (ATSC1)
= "TeleXitos"

40.4 (ATSC1)
= "Oxygen"

11.7 (ATSC1)
= "Comet"

11.8 (ATSC1)
= "QVC"

Relocation of ATSC 1.0 Virtual Displayed Channels of the Lighthouse Station to Existing ATSC 1.0 TV in Tucson in May 23, 2024 (continued)

KHRR
(RF CH. 16)



KUAT-TV
(RF CH. 30)
KUAS-TV
(RF CH. 28)



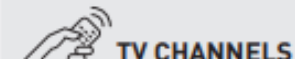
KVOA
(RF CH. 23)



KOLD
(RF CH. 32)



KMSB
(RF CH. 25)



~~4.1 (ATSC1)~~
~~"KCOP-DT"~~

~~4.2 (ATSC1)~~
~~"KRON-TV"~~

~~4.3 (ATSC1)~~
~~"Rewind TV"~~

~~4.4 (ATSC1)~~
~~"Charge!"~~

~~4.5 (ATSC1)~~
~~"Shop LC"~~

6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

40.1 (ATSC1)
= "KHRR-DT"
= "Telemundo"

40.2 (ATSC1)
= "TeleXitos"

4.1 (ATSC1)
= "KVOANBC"
= "NBC"

4.2 (ATSC 1)
= "COZI TV"

4.3 (ATSC1)
= "Ion Mystery"

4.4 (ATSC1)
= "DABL"
= "This TV"

4.5 (ATSC1)
= "Grit"

40.3 (ATSC1)
= "NBC LX"

Z13.1 (ATSC1)
= "KOLD DT"
= "CBS"

13.2 (ATSC1)
= "MeTV"

13.3 (ATSC1)
= "Oatlaw"

13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

13.5 (ATSC1)
= "KPHE-LD"

13.6 (ATSC1)
= "CHARGE!"

40.4 (ATSC1)
= "Oxygen"

11.1 (ATSC1)
= "KMSB-HD"

11.2 (ATSC1)
= "Quest"

11.3 (ATSC1)
= "True Crime Network"

11.4 (ATSC1)
= "Nosey"

11.5 (ATSC1)
= "Shop LC"


11.6 (ATSC1)
= "?????"

11.7 (ATSC1)
= "Comet"

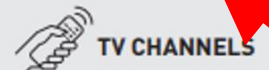
11.8 (ATSC1)

Creation of ATSC 3.0 Simulcasted Virtual "Displayed Channels" at the Upgraded Lighthouse Station

Lighthouse
KHRR
 (RF CH. 16)




ATSC 3.0



TV CHANNELS

KUAT-TV
 (RF CH. 30)




ATSC 1.0

KVOA
 (RF CH. 23)




ATSC 1.0

KOLD
 (RF CH. 32)



ATSC 1.0

KMSB
 (RF CH. 25)



ATSC 1.0

- ~~4.1 (ATSC1)~~
~~"KCOP-DT"~~

- ~~4.2 (ATSC1)~~
~~"KRON-TV"~~

- ~~4.3 (ATSC1)~~
~~"Rewind TV"~~

- ~~4.4 (ATSC1)~~
~~"Charge!"~~

- ~~4.5 (ATSC1)~~
~~"Shop LC"~~

- 6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

- 6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

- 6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

- 40.1 (ATSC1)
= "KHRR-DT"

- "Telemundo"

- 40.2 (ATSC1)
= "TeleXitos"

- 4.1 (ATSC1)
= "KVOANBC"
= "NBC"

- 4.2 (ATSC 1)
= "COZI TV"

- 4.3 (ATSC1)
= "Ion Mystery"

- 4.4 (ATSC1)
= "DABL"
= "This TV"

- 4.5 (ATSC1)
= "Grit"

- 40.3 (ATSC1)
= "NBC LX"

- 13.1 (ATSC1)
= "KOLD DT"
= "CBS"

- 13.2 (ATSC1)
= "MeTV"

- 13.3 (ATSC1)
= "Oatlaw"

- 13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

- 13.5 (ATSC1)
= "KPHE-LD"

- 13.6 (ATSC1)
= "CHARGE!"

- 40.4 (ATSC1)
= "Oxygen"

- 11.1 (ATSC1)
= "KMSB-HD"

- 11.2 (ATSC1)
= "Quest"

- 11.3 (ATSC1)
= "True Crime Network"

- 11.4 (ATSC1)
= "Nosey"

- 11.5 (ATSC1)
= "Shop LC"

- 11.6 (ATSC1)
= "?????"

- 11.7 (ATSC1)
= "Comet"

- 11.8 (ATSC1)
= "QVC"

Creation of ATSC 3.0 Simulcasted Virtual "Displayed Channels" at the Upgraded Lighthouse Station

KHRR
(RF CH. 16)



40.1 (ATSC3)
= "KHRR"

6.1 (ATSC3)
= "PBS HD"

4.1 (ATSC3)
= "KBOANBC"
= "NBC"

13.1 (ATSC3)
= "KOLD-DT"
= "CBS"

11.1 (ATSC3)
= "KMSB-HD "

9.1 (ATSC3)
= "KGUN HD"
= "ABC"

KUAT-TV
(RF CH. 30)
KUAS-TV
(RF CH. 28)

6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

40.1 (ATSC1)
= "KHRR-DT"
= "Telemundo"

40.2 (ATSC1)
= "TeleXitos"

KVOA
(RF CH. 23)



4.1 (ATSC1)
= "KVOANBC"
= "NBC"

4.2 (ATSC 1)
= "COZI TV"

4.3 (ATSC1)
= "Ion Mystery"

4.4 (ATSC1)
= "DABL"
= "This TV"

4.5 (ATSC1)
= "Grit"

40.3 (ATSC1)
= "NBC LY"

KOLD
(RF CH. 32)



13.1 (ATSC1)
= "KOLD DT"
= "CBS"

13.2 (ATSC1)
= "MeTV"

13.3 (ATSC1)
= "Oatlaw"

13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

13.5 (ATSC1)
= "KPHE-LD"

13.6 (ATSC1)
= "CHARGE!"

40.4 (ATSC1)
= "Oxygen"

KMSB
(RF CH. 25)



11.1 (ATSC1)
= "KMSB-HD"

11.2 (ATSC1)
= "Quest"

11.3 (ATSC1)
= "True Crime
Network"

11.4 (ATSC1)
= "Nosey"

11.5 (ATSC1)
= "Shop LC"

11.6 (ATSC1)
= "?????"

11.7 (ATSC1)
= "Comet"

11.8 (ATSC1)
= "QVC"

Lighthouse

Creation of ATSC 3.0 **Simulcasted Virtual "Displayed Channels" at the Upgraded Lighthouse Station (continued)**

KHRR
(RF CH. 16)



KTVU
(RF CH. 31)



KNTV
(RF CH. 13)



KPYX
(= "KPIX +")
(RF CH. 28)



KMSB
(RF CH. 25)



40.1 (ATSC3)
= "KHRR"

6.1 (ATSC3)
= "PBS HD"

4.1 (ATSC3)
= "KBOANBC"
= "NBC"

13.1 (ATSC3)
= "KOLD-DT"
= "CBS"

11.1 (ATSC3)
= "KMSB-HD"

9.1 (ATSC3)
= "KGUN HD"
= "ABC"

6.1 (ATSC1)
27.1 (ATSC1)
= "PBS HD"

6.2 (ATSC1)
27.2 (ATSC1)
= "PBS KIDS"

6.3 (ATSC1)
27.3 (ATSC1)
= "PBS 6 PLUS"

40.1 (ATSC1)
= "KHRR-DT"
= "Telemundo"

40.2 (ATSC1)
= "TeleXitos"

4.1 (ATSC1)
= "KVOANBC"
= "NBC"

4.2 (ATSC1)
= "COZI TV"

4.3 (ATSC1)
= "Ion Mystery"

4.4 (ATSC1)
= "DABL"
= "This TV"

4.5 (ATSC1)
= "Grit"

40.3 (ATSC1)
= "NBC LX"

13.1 (ATSC1)
= "KOLD DT"
= "CBS"

13.2 (ATSC1)
= "MeTV"

13.3 (ATSC1)
= "Oatlaw"

13.4 (ATSC1)
= "KOLDDT4"
= "Defy TV"

13.5 (ATSC1)
= "KPHE-LD"

13.6 (ATSC1)
= "CHARGE!"

40.4 (ATSC1)
= "Oxygen"

11.1 (ATSC1)
= "KMSB-HD"

11.2 (ATSC1)
= "Quest"

11.3 (ATSC1)
= "True Crime Network"

11.4 (ATSC1)
= "Nosey"

11.5 (ATSC1)
= "Shop LC"

11.6 (ATSC1)
= "?????"

11.7 (ATSC1)
= "Comet"

11.8 (ATSC1)
= "QVC"

NET RESULTS

- The 6 most powerful TV channels in Tucson are now "simulcast" in both the new "NextGen" ATSC 3.0 format and the legacy ATSC 1.0 formats

ADDITIONAL DETAILS

- <https://www.radiodiscussions.com/threads/nextgen-atsc-3-0-coming-to-tucson-may-23.771340/>

