MBARC Beacon

The Morongo Basin Amateur Radio Club Newsletter

APRIL 2025 EDITION

w6ba.net Morongo Basin Amateur Radio Club

The "Cawfee Tawk" daily informal net celebrated it's 5th Anniversary on March 30, 2025.

Cawfee Tawk Fifth Anniversary

*By Aaron Chesney **KM6IAU**, submitted March 30, 2025*

It was great to hear so many check-ins on the 5th anniversary of Cawfee Talk. Paul **AA6SM** was net control. Here is a list of the 30 check-ins, in order of recognition:

Paul **AA6SM**	Jim **KI6WTI**	Glenn **N6GIW**
Rob **WO4ROB**	Lis **N6NDC**	Judy **N6JLL**
Judy **KK6NWG**	James **N6IY**	Jake **W6JOD**
Keith **N6GKB**	Todd **KD6DIQ**	Ryan **KK6WCX**
Loren **KM6QQP**	Tod **K6SUD**	Frank **KD6RNS**
Perry **KN6WTI**	Jake **N6XIV**	Jessie **KA6CMJ**
Larry **AD6G**	Steve **KM6LKL**	Keith **KC7HT**
Aaron **KM6IAU**	John **KO6GRN**	Patti **KD6RNR**
Maja **KO6DAV**	Gerald **KN6HQL**	Andy **KR6GAX**
Clifford **KK6QMS**	Chris **WB6CDF**	Bryan **KF6YGK**

The **MBARC** Cawfee Tawk was … COVER STORY, page 3

Information At A Glance

Upcoming Club Meetings

Monthly club meetings are on the 3rd Saturday, every month, at 1400.

Date	&	Time	Location
Apr 19	@	1400	Yucca Mesa Community Center
May 17	@	1400	Yucca Mesa Community Center
Jun 21	@	1400	Yucca Mesa Community Center

Local Nets

Net Name	Day	&	Time
Amateur Radio Emergency Service	MON	@	1915
MBARC Weekly Net	TUE	@	1900
MBARC "Cawfee Tawk"	DAILY	@	1000

MBARC Linked Repeater System

*For more info, see the 2nd to last page for detailed diagram of the **MBARC** Linked Repeater System or visit w6ba.net.*

Site	MHz	+/-	T
W6BA Yucca Valley / Paxton Hill	146.790	−	136.5
W6BA Twentynine Palms / Donnell Hill	147.060	+	136.5
WB6CDF Landers / Fire Station	447.580	−	173.8
AD6G Pipes Canyon	446.120	Ø	146.2

Local VoIP-to-RF Nodes

System	# Node	RF Link
AllStarLink	503088	**KM6IAU** to **W6BA** YV
EchoLink	KM6IAU-L	**KM6IAU** to **W6BA** YV
EchoLink	WO4ROB-L	**WO4ROB** to **W6BA** YV

Local RF-to-VoIP Nodes

Site	MHz	+/-	T	System	# Node/TG
KD6DIQ YV	145.770	Ø	67.0	AllStar	28855
WB6CDF YV	447.000	−	CC 10	DMR/BM	TS1: TG 3106 TS2: TG 2

MBARC Board of Directors

President	Paul Edwards	**AA6SM**
Vice President	Larry Mollica	**AD6G**
Secretary	Jake Jakubowski	**N6XIV**
Treasurer	Glenn Miller	**N6GIW**
Board Member	Aaron Chesney	**KM6IAU**
Board Member	Bryan Heveron	**KF6YGK**
Board Member	Rob Cloutier	**WO4ROB**
Repeater Trustee	Glenn Miller	**N6GIW**

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Editor	Aaron Chesney	**KM6IAU**
Photos	Maja Chesney	**KO6DAV**
	Kathie Edwards	
Contributors	Aaron Chesney	**KM6IAU**
	Lis Schwitters	**N6NDC**
	Larry Mollica	**AD6G**
Birthdays	Maja Chesney	**KO6DAV**

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Your Newsletter, Your Voice.

If you have material you'd like to share in a future newsletter, get in touch.

Aaron Chesney **KM6IAU**

442-205-1873, extension 5

Aaron@**KM6IAU**.net

President's Message

Summer Field Day is always the fourth full weekend of June, beginning at 1800 UTC (1100 Pacific) Saturday and running through 2059 UTC (1059 Pacific) Sunday. Field Day 2025 is June 25-26. **MBARC** will be set up at the Yucca Mesa Community Center. Field Day is amateur radio's open house and is a great way to promote ourselves to the community! Please participate if you can.

The w6ba.net website is in the process of being updated and suggestions for content are welcome. Alpha and beta versions of the update can be viewed at **test.w6ba.net** and bug reports (send to webmaster@w6ba.net) are appreciated.

Suggestions as to where we want to go and what we want to do as a club are always welcome. I can be contacted at the club's email address w6ba.condition765@slmail.me and I will always respond to any serious query. After all, this is your club!

73s,

Paul Edwards **AA6SM**

262-412-7323

w6ba.condition765@slmail.me

Member Birthdays – April 2025

On behalf of the club, I extend our warmest birthday wishes to all our cherished members celebrating a birthday this month.

May your special day bring joy, love, and peace. Stay happy and blessed.

If you'd like your birthday to be included for recognition here and on the club's Facebook page, get in touch.

Maja Chesney **KO6DAV**
442-205-1983, extension 6
maj.chesney@gmail.com

COVER STORY, continued

… originally conceived by Roger Sherwin **KF6BIG** in 2020 as a practical way for area hams to fellowship, check in on each other's health and welfare, *and* altogether strengthen camaraderie amidst the challenges to liberty and assembly brought on by then-developing global events.

For most Cawfee Tawk's first five years, Rob **WO4ROB** diligently dispatched the role of net control. When Rob couldn't make it, it was usually Paul **AA6SM** or Keith **N6GKB** who aptly took up the torch. A few other hams have also filled-in on occasion, including Larry **AD6G**, James **N6IY**, and Aaron **KM6IAU**.

Last year's anniversary garnered 24 check-ins, according to Rob **WO4ROB**. This year we beat that number by six. Perhaps on the next anniversary we will increase by another multiple of six! –·–

Tour of Bill Adams **W6BA** Estate

*By Lis Schwitters **N6NDC**, submitted on March 29, 2025*

*Editor's note: For more about Bill Adams **W6BA**, see the December 2024 edition of the **MBARC** Beacon club newsletter, page 3.*

Cindy Bernard (Bill Adams' granddaughter) gave me the heads up for this event that will include the estate of Bill Adams. Club members may be interested in touring his old QTH. The tour includes a tour of five residences and two demonstration gardens, one of which is the estate of Bill Adams **W6BA** and the rhombic antennas.

Date: Saturday, April 27, 2025.
Time: 9:00am to 4pm.
Where: Various locations near Joshua Tree.

To register, or for more information, visit:

https://www.mbconservation.org/register_for_2025_desert-wise_landscape_tour

Further info on the antennas:

http://lists.contesting.com/_towertalk/1998-10/msg00661.html –·–

Responding to Unlicensed Operation on the Repeater

*By Aaron Chesney **KM6IAU**, submitted March 31, 2025*

Recently an unlicensed operator has been soliciting for "radio checks" and otherwise seeking to engage in two-way communication on the club repeater. *While licensed hams maintain the privilege to use the repeater*, it is often encouraged to not engage with non-emergency, unlicensed operators.

If one is to respond, Todd **KD6DIQ** recently gave a "master-class" response, the fundamentals of which were simple: being polite and professional.

- "We'd be glad to respond to you when you get your callsign."
- "I want to apologize to you, sir. When you get your callsign, then I can talk to you. Until then, we have to refrain."

Hearing Todd's response was a great reminder to me of what, I think, makes this club great: it has always sought to *welcome* newcomers to the hobby. –·–

March 2025 ***MBARC*** *club meeting. – Photo by Maja Chesney* ***KO6DAV***

Meeting Minutes – March 2025

Submitted by Jake Jakubowski ***N6XIV****, Club Secretary, on March 18, 2025*

Editor's note: I have made a few corrections below. For the official record, contact the club secretary.

Aaron **KM6IAU** distributed the updated **MBARC** Club Roster ahead of the start of the Club meeting.

Judy **KK6NWG**, Kathie Edwards, and Maja **KO6DAV** set up a coffee and sweets bar for members to enjoy.

President Paul **AA6SM** opened the meeting at 1400 and announced the club officers and two guests.

Each club member announced their name, callsign, and residence town.

Club Treasurer Glenn **N6GIW** reported a balance is $3,456.42. He also mentioned problems with a new bank debit card.

As Club Repeater Trustee, Glenn **N6GIW** followed by reporting that the repeaters are working well and mentioned a reduction of interference.

As a representative of the Membership Committee, Aaron Chesney **KM6IAU** discussed the format and information available on the updated club roster.

Club president Paul **AA6SM** addressed Larry Mollica **AD6G** on a plan and equipment report for the summer field day by 06 May. Larry called for volunteers to help inventory and test the equipment available.

Rob Cloutier **WO4ROB** offered Ham Radio License testing provided there are at least 5 testees. He mentioned he will be in the area until 6 July.

There was no date for the Pioneer town event.

President Paul **AA6SM** announced he would like to surpass last year's 24 check in for the March 30th Coffee Talk. He requested a Facebook posting along with other media posting.

President Paul **AA6SM** gave a presentation on 6-meter operating to include ducking, bouncing, and sporadic-E phenomena. The band is 50 to 54 megahertz and unlikely to be taken away. Six club members have 6-meter capable radios.

President Paul **AA6SM** and Virginia Haddad discussed a possible presentation of Amateur radio at Copper College.

Aaron **KM6IAU** talked about Amateur radio frequencies being allocated to other radio service or commercial service if left unused.

Rob **WO4ROB** gave away one balloon light to each club member from a purchase $10 for 100 on Amazon.

A 50/50 drawing was held.

The meeting closed at 1400. –·–

The sweets bar set up before the meeting by Judy ***KK6NWG****, Kathie Edwards, and Maja* ***KO6DAV*** *for members to enjoy. – Photo by Kathie Edwards*

Customizations to Roger **KF6BIG**'s Radioless AllStar Node

*By Larry Mollica **AD6G**, submitted on March 27, 2025*

Since summer of 2020, club member Roger **KF6BIG** in Joshua Tree has been using a "radio-less node" on the AllStarLink network. AllStar has been covered a few times at club meeting presentations and newsletters, so I won't delve into it here.

His radio-less AllStar node is an early version of a commercial product, the ARN-1. Roger's early version of the product uses a stock Yaesu hand microphone (with 16 digit keypad) to enter DTMF commands as its main means of operator control. *(Node control can also be done by means of a local web interface, but this does not lend itself to use by the sight-impaired.)*

Early version of the ARN-1.

Unfortunately for some time, Roger has been dealing with eyesight trouble and lately, somewhat more so. Using the microphone control has been a challenge for Roger from the start, for the following reasons:

- Annoyingly tiny buttons in a crowded layout;
- An approximate 2 second timeout on command entry. If you pause more than 2 seconds between digits, the sequence does nothing.
- PTT button must be held down continuously while entering a DTMF command, requiring both hands for the operation. Slipping off PTT for a fraction of a second means starting over.

*Inside Roger's ARN-1. The partly detached rainbow ribbon cable is to connect the lid-affixed aftermarket keypad to the GPIO of the Raspberry Pi. – Photo by **AD6G***

In addition to the above drawbacks, the design of the radio-less ARN-1 has the *same unfortunate side effect* as a radio-operated "hotspot" type node: the requirement to assert PTT in order to enter a DTMF command means the PTT itself is asserted downstream to all connected repeaters and stations. Depending on the size of the network, potentially hundreds of repeaters and stations are effectually keyed-up while an operator fumbles through DTMF entry.

Usually, the DTMF tones of the three-digit sequence for the disconnect command are muted by the local node as detected, but often a short burst of DTMF leaks through before the muting kicks in; that is heard all down the network. The mechanical sounds of the operator handling the microphone and pushing the buttons is also along for the ride.

It is common when a big net ends, such as when the WIN System tech net ends, to hear the above clatter going on as dozens of AllStar, IRLP, etc. hotspot nodes drop off the network. Making matters worse, for whatever reason Roger's node is unusually slow to mute the DTMF, and the WIN System admins had been (understandably) giving him a bit of guff about it.

With the above in mind fo a while, I had been thinking about ways to mitigate these issues. The first thing I did (coming under the heading of "low-hanging fruit") was to add a pushbutton to the side of the node box. When the button is pushed, a script running on the node's Raspberry Pi – which is at the heart of most Allstar nodes these days – drops all network connections on the node, instantly and without disrupting the network in the process. *(I've also*

assigned other functions to the button depending on how long it is held down.)

The button mod took care of the disconnect issue, but the previous three remained. What I felt was needed was a non-DTMF reliant method of using the same digit sequences Roger was already familiar with.

This project got into gear when Roger asked if there was some way his node could speak the digits as they were being keyed in. This is not something that could be easily done with the ARN-1 as it was designed, but could be easily done with an added matrix keypad. I showed Roger a keypad I'd already acquired and he liked the idea.

*Larger keypad compared to tiny buttons on a microphone. – Photo by **AD6G***

I knew I'd need help with the mechanics of getting the new keypad physically attached. If I had at it with an X-Acto and Dremel, I knew it would end up being a ghastly mess. After asking around, club member Frank **KD6RNS** said his daughter Michelle did laser engraving and cutting of plastics. Eventually I met up with her and the impressive laser machine, and ended up with two sheets of precisely cut Lucite® that in the end worked out for mounting the new pad on top of the box. Originally I'd though I'd flush mount it in a big hole on top of the box, and her machine could have cut such a hole perfectly. But the clearance was so tight on the inside, it seemed too risky to try.

*Keypad, embedded in a Lucite® frame, affixed atop Roger **KFGBIG**'s original ARN-1 case. – Photo by **AD6G***

The keypad matrix is electrically scanned via the GPIO (General-Purpose Input/Output) interface on the node's Raspberry Pi, facilitated by a bit of custom software which passes along the digits to the node's software. This simulates DTMF entry but doesn't actually use DTMF. The matrix scanning Python code I cribbed from an example on the internet and hacked to the point of working, but without the voice feedback Roger asked for. Pressed for time as I'd already had Roger's node out of service for several days, I asked Aaron **KM6IAU** to finish it up while I finished the mechanical work. Aaron got all that working as well as fixing a problem I'd introduced in my haste. The Allstar node was returned to Roger after I'd had it for a week, and is doing everything I'd hoped it would:

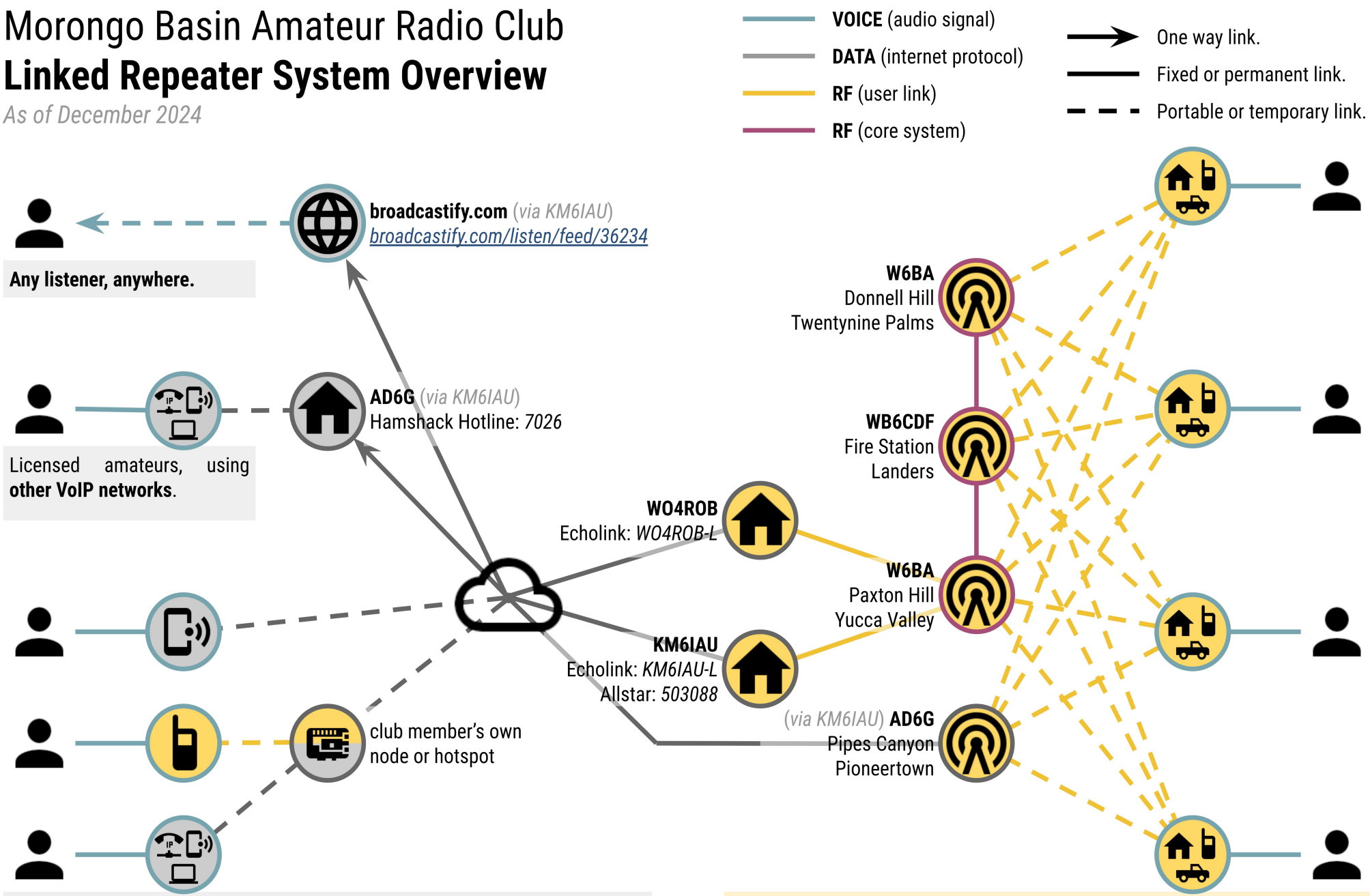
- Bigger keypad: easier to work by feel;
- The two second timeout is now a 1 minute timeout, no rush to get a command input.
- Does not require PTT to operate. One hand will do.
- Does not key up an attached network when entering commands, no DTMF bursts sent because neither DTMF nor PTT are actually involved. (The previously added disconnect button also remains available.)
- It speaks the digits as they are pressed, so Roger knows what it's doing.
- Immediate key entry has been converted to "en-bloc" dialing. Normally to enter an Allstar command, the command is executed as soon as the last (valid) digit is dialed. E.g. to connect to node **503088**, the DTMF command (***3** to connect) would be ***3 503088**. This would immediately cause the connection to initiate. The new keypad uses "en-bloc" dialing, using the pound ("#") as the end of dial character. The command is the same except nothing happens until pound is dialed at the end, i.e. ***3 503088 #**. This provides the opportunity to correct a mistake. As an example, if I dial ***3 503089** by mistake, it will not attempt to connect to node **503089** as I'd *not yet dialed* the pound ("#"). I'd hear via the speaker that I'd pressed the **9** instead of **8**. I can hit star ("*****") and start over.

So far Roger is happy with the new control. Aaron and I will probably be making a few improvements to the software in the near future. –-–

*Roger's customized ARN-1 in his hamshack. – Photo **AD6G***

Morongo Basin Amateur Radio Club
Linked Repeater System Overview

As of December 2024



Licensed amateurs **with** club membership, using **Allstar*** or **Echolink****.

Please use restrictive access means, such as PL tone and low-gain antenna for RF links, or password access for IP links. Do not link-in broad-access systems, such as other repeaters or reflectors, where such linking could transmit onto our club's system. Thank you.

Licensed amateurs **with or without** club membership, using **RF**.

Please do not link-in broad-access systems, such as other repeaters or reflectors, where such linking could transmit onto our club's system. Thank you.

* Allstar access needs to be manually set up. Contact linkrequest@W6BA.net to submit your request.
** Echolink access may need to be manually set up. Contact linkrequest@W6BA.net to submit your request.

Calendar – April 2025

SUN	MON	TUE	WED	THU	FRI	SAT
Apr 29	Apr 30 1915 – **ARES** net	**1** 1900 – **Club net** ctrl: Paul **AA6SM** birthday: Clifford **KK6QMS**	**2**	**3**	**4**	**5**
6	**7** 1915 – **ARES** net	**8** 1900 – **Club net** ctrl: Fred **WO6C**	**9**	**10**	**11**	**12**
13	**14** 1915 – **ARES** net	**15** 1900 – **Club net** ctrl: Glenn **N6GIW**	**16**	**17**	**18**	**19** 1400 – **Club mtg**, Yucca Mesa Community Center
20	**21** 1915 – **ARES** net birthday: Manuel **AE6SG**	**22** 1900 – **Club net** ctrl: Larry **AD6G**	**23**	**24**	**25**	**26**
27	**28** 1915 – **ARES** net	**29** 1900 – **Club net** ctrl: Aaron **KM6IAU**	**30**	May 1	May 2	May 3

KD6DIQ AllStarLink Node#28855 Schedule

YV: 145.77MHz, ∅shift, 🅃67.0Hz

EVERYDAY

0000 – 0100 WIN System #2560
2200 – 2400 WIN System #2560

SUN

No additional program, system open.

MON

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332

TUE

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332
1700 – 1900 East Coast Refl. #45225

WED

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332
1700 – 1900 East Coast Refl. #45225

THU

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332
1700 – 1900 East Coast Refl. #45225

FRI

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332
1830 – 2400 WIN System #2560

SAT

0400 – 0730 East Coast Refl. #45225
1000 – 1300 Alaska Morning #29332
1700 – 1720 Newsline
2000 – 2200 East Coast Refl. #45225