



SERVING CENTRAL ILLINOIS AMATEUR RADIO SINCE 1921

IN THIS ISSUE

## From The President

by Rick Suhadolc N9CKL

Welcome all Central Illinois Radio Club Members:

First, we have two new CIRC Board Members for 2020-2021 , Rob Cherry K9KGM Secretary and Larry Gibson W9BJG Treasurer, Welcome!

Knowing the meeting minutes, and the upcoming expected expenses, and financial balances are crucial. I would like to thank Keith Hanson AC9S, outgoing Secretary, and Greg Kellerman KC9WVR, outgoing Treasurer for keeping us up to date, and on budget, before every meeting.

Having cost estimates for each new business item allows the Treasurer to forecast our expenses and cash flow. A club caught short in finances is the worst place for the interests of a club. Receipts shall be

submitted per the Treasurer duties in the Circ Constitution Article III before payment.

Again, I would like to thank the returning Board Members John Payne AC9TN Vice President, Member at Large: Grant Zehr AA9LC, Chairman: Repeater Ed Deutsch KC9GF, Newsletter Editor: Jeff Lovell KC9QQM, Public Event and Social Chairman: Jim Baker WB9EDL.

Let's all enjoy our new 2meter Repeater Frequency: 146.640/340. The biggest change in the History of the Club!

Rick  
N9CKL

### Satellite Mesh Network See Beyond Line Of Site

Provided by Rock Suhadolc N9CKL from MWRF.com

### Mil-Areo RD-over-Fiber Covers 10Mhz thru 6Ghz

Provided by Rock Suhadolc N9CKL from MWRF.com

### FAA Clears Amazon Drone Deliver Space

Provided by Rock Suhadolc N9CKL from MWRF.com

# Satellite Mesh Network Sees Beyond Line of Site

Provided by Rock Suhadolc N9CKL from MWRf.com

[Lockheed Martin](#) has been awarded a Tranche 0 contract of the [Space Transport Layer](#) from the [Space Development Agency](#) (SDA) to demonstrate a mesh network of 10 small low-Earth-orbit satellites (LEOS). The network, which is to be launched in just two years, will link different terrestrial warfighting systems and their users with space sensors for enhanced beyond line-of-sight (LOS) awareness for the warfighters.

The \$187.5-million contract, from the SDA, is for the test and demonstration of the satellites and the communications network they form, with a total of 20 satellites to be launched by two defense contractors including Lockheed Martin. By linking warfighters using different system domains, the satellite networks will enable Joint All-Domain Operations. "We see a world across all warfighting domains where fourth- and fifth-generation fighters and tactical forces on the ground can connect seamlessly with holistic situational awareness," said Kay Sears, vice-president and general manager of Lockheed Martin Military Space. "Interoperability and battlespace connectivity are critical to staying ahead of our adversaries."

The 10 LEOS being launched by Lockheed Martin (see the figure) will provide wide-bandwidth, low-latency data communications links and will introduce Link 16 network capability to space. Such communications capabilities will connect a wide range of electronic defense systems, including for F-16, F-22, and F-35 fighter aircraft, missile defense networks like PAC-3 and THAAD missile defense networks, and Integrated Air and Missile Defense (IAMD) networks. The data links will provide sensor-to-shooter targeting and situational awareness for tactical land and maritime warfighters. In addition, the satellites will provide interoperability with both military-protected and commercial satellite-communications (satcom) systems. The 10 LEOS will be programmable via Lockheed Martin's SmartSat software and cyber-hardened by means of Lockheed Martin's Cyber Resiliency Level model.

# Mil-Aero RF-over-Fiber Covers 10Mhz thru 6Ghz

Provided by Rock Suhadolc N9CKL from MWRf.com

ViaLite Communications' new Mil-Aero RF over Fiber Link pair, which spans a frequency range of 10 MHz to 6 GHz, is specifically tailored for demanding Air Force and navy applications, Army telemetry systems, signals intelligence (SIGINT) deployments, tethered aerostat and drone applications, plus multi-service military electronic warfare systems; and any applications where fiber is an essential replacement to coax.

The versatile new RF-over-fiber links covers bands from HF, VHF, and UHF through to telemetry and satcom bands P, L, S, and C. It also offers the best spurious-free dynamic range (SFDR) performance in its class, making it ideal for high bandwidth applications or where the application has a large range of RF signal powers. The link is further enhanced by a low noise figure (NF) and optional gain and 1-dB compression points (CP).

Supporting distances of up to 50 km, the Mil-Aero link is available in rack, chassis card, or OEM module formats, including ViaLite's new black OEM design which is rated for outdoor use. All formats come with a standard 5-year warranty.

# FAA Clears Amazon Drone Delivery Space

Provided by Rock Suhadolc N9CKL from MWRf.com

The [Federal Aviation Administration](#) (FAA) is clearing the way for the ambitious air-delivery business of retail giant [Amazon](#), its drone-based delivery service known as Amazon Prime Air, to use unmanned aerial systems (UAS) for the rapid delivery of commercial goods. The FAA is supporting this use of autonomous UAS to deliver packages safely and efficiently during all weather conditions. The use of drones for commercial deliveries

has increased significantly during the past year because of the COVID-19 virus-based pandemic.

Amazon Prime Air vice-president David Carbon explained: "This certification is an important step forward for Prime Air and indicates the FAA's confidence in Amazon's operating and safety procedures for an autonomous drone delivery service that will one day deliver packages to our customers around the world." He added: "We will continue to develop and refine our technology to fully integrate delivery drones into the airspace and work closely with the FAA and other regulators around the world to realize our vision of 30-minute delivery."

The approval comes as the result of Amazon working with the FAA for five years on achieving the vision of delivery by unmanned vehicle. The FAA granted an experimental airworthiness certificate to Amazon's logistics division in 2015 after Amazon had announced plans to pursue delivery by unmanned aerial vehicles (UAVs) in 2013. The latest Prime Air drone (see the figure) has a range of 15 miles and can carry packages weighing under 5 lbs.

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Central Illinois Radio Club  
<http://www.qsl.net/w9am/>  
Bloomington, Illinois  
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## AREA NETS

Tuesday 8:30 P.M. 28.450  
CIRC Open 10 meter Net

Tuesday 9:00 P.M. 146.640 (156.7PL)  
CIRC Open Net

Thursday 8:00 P.M. 28.450  
Vertical polarization is encouraged but not required

Sunday 08:15 A.M. 1.915  
Open 160 meter AM net

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If you are wondering where all the nets are, it was brought to my attention that many of these are no longer in operation. I have left the ones the CIRC handles directly.

If you want another net listed, please send me an email directly and please verify it is a current net and I will add it to the list.

Jeff KC9QQm

[Kc9qqm@gmail.com](mailto:Kc9qqm@gmail.com)

## AREA EXAM DATES

Following is the schedule for W5YI-VEC Amateur Radio exams for the year 2020. At the Community Room of the Bloomington Public Library located at the intersection of E. Olive St. and S. East St. Entrance off of S. East St.

Please bring two forms of identification. You must have an FCC issued FCC Registration Number (FRN) or Social Security Number. We cannot administer a test without your FRN or SSN. You will need a copy of your Current license plus any CSCE you want to apply.

2020 dates;

11/4 Unknown at this time

Exams' in Morton are held at the Morton Public Library, 315 West Pershing at 12:00 Noon the third Saturday of even numbered months and at the Peoria Superfest.

CIRC Meeting  
Fourth Wednesdays of the month at 7:00 p.m. at the  
American Red Cross  
1 Westport Dr.  
Bloomington, IL 61704

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# Calendar of Events

CENTRAL ILLINOIS RADIO CLUB  
P.O. BOX 993 BLOOMINGTON, IL 61702-0993

WEB PAGE

[HTTP://WWW.QSL.NET/W9AML/](http://www.qsl.net/w9aml/)

Daily Coffee Klatch Monday thru Friday

\*\*\*\* The weekly Coffee Klatch has been moved to the 146.94 repeater for the time being. Remember the new PL is 156.7hz \*\*\*\*

9:00 a.m. at Dairy Queen Veterans at Cub's  
XYL's Join the OM's Monday and Friday

Weekly 10 Meter Net

Every Tuesday evening at 28.450 MHz- at 8:30 p.m.

Weekly 2 Meter Net

Every Tuesday evening on the 146.640-repeater at 9:00 p.m.

Weekly 6 Meter Net

Every Thursday evening at 50.135 MHz at 7:00 P.M.

Weekly 160 Meter AM Net

Every Sunday morning at 1.915 MHz at 8:15 A.M.

*President: Rick Suhadolc  
(N9CKL)*

*Vice-President: John Payne (AC9TN)  
Secretary: Rob Cherry  
(N9TO)*

*Treasurer: Larry Gibson  
(W9BJG)*

*Member at large: Grant Zehr  
(AA9LC)*

*Newsletter Editor: Jeff Lovell (KC9QQM)*

*The CIRC is a not-for-profit ARRL special service club whose purpose is to advance the service of Amateur Radio. Located in Central Illinois, the CIRC and its members welcome all to use the 146.64 repeater and to attend club meetings.*

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**75 Meter HF Traffic handling nets**

NET / TIME	FREQ khz
<hr/>	
<b>NORTH CENTRAL PHONE NET</b>	
M-F 7:00 A.M. central time	3912
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<b>ILL. PHONE NET</b>	
M-F 4:45 P.M. central time	3857
SUN. 8:00 A.M. central time	3940
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<b>ILLINOIS SIDEBAND NET</b>	
M-SAT. 6:00 P.M. central time	3905
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<b>75 METER INTERSTATE SIDEBAND NET</b>	
DAILY 0100 UTC	3985
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<b>ITN INDIANA TRAFFIC NET</b>	3910
DAILY 1230 UTC	OR
2200 UTC	3912
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# Short CIRCUITS

P.O. Box 993  
Bloomington, IL 61702