

SPECTRUM

L3Harris Communication Systems Publication | Spring 2021 Edition

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L3HARRIS™



Spectrum is an L3Harris Communication Systems publication. The magazine provides the most-up-to-date information about innovative technologies, products and customer solutions through interactive features and in-depth story telling.



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During a light-starved night, with no moon and cloud-obscured stars—that is when the superiority of L3Harris Technologies' night-vision tube performance is time-proven.

Inside Cover photo:

A U.S. Marine with Alpha Company, Infantry Training Battalion, School of Infantry – West, programs an AN/PRC-117 multiband manpack radio as part of the capstone exercise for the Infantry Marine Course on Marine Corps Base Camp Pendleton, California, April 28, 2021. IMC is a 14-week pilot course designed to create better trained and more lethal entry-level infantry Marines prepared for near-peer conflicts. (U.S. Marine Corps photo by Sgt. Jeremy Laboy)

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.

Non-Export Controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

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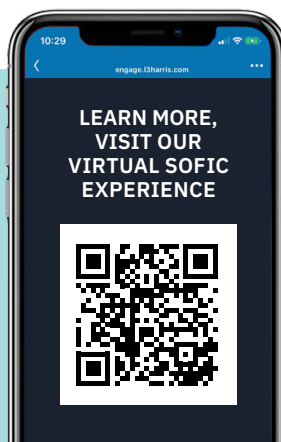
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L3Harris Public Safety and Professional Communications customers have the combined strength of the company's full catalog of solutions and local service support through its two-tier distribution model and partnerships with its indirect channel dealers.



L3Harris is a proud mission partner of U.S. and Allied Special Forces. Mission success hinges upon the courage, professionalism and skill of those elite forces, enabled by key L3Harris technologies. Use your smartphone's camera to activate the interactive experience.

NEWS BRIEFS

U.S. Marine Corps Awards L3Harris \$88 Million for Panther Satellite Terminals

The U.S. Marine Corps has awarded L3Harris Technologies a five-year, \$88 million ceiling, single-award IDIQ contract for a small, lightweight satellite terminal that delivers extremely reliable high-bandwidth voice, video and data.

L3Harris will provide its Panther II Very Small Aperture Terminals (VSAT) as part of the Marine Corps Wideband Satellite-Expeditionary (MCWS-X) program. The MCWS-X terminal consists of the 96 cm Panther II VSAT in a tri-band configuration with multiple modular modems and power options.



The Falcon III® family of radios have been proven in the field and trusted by more than 700,000 warfighters worldwide.

Bahrain Defense Forces Selects L3Harris Technologies C4I Systems

Bahrain Defense Forces has selected L3Harris Technologies to provide a C4I system as part of the country's effort to implement enhanced battlefield management and integrate ISR solutions across its ground, air and naval forces.

The L3Harris C4I system will provide the Bahrain Defense Forces with Initial Operational Capabilities (IOC) and will integrate its Falcon III® radios, delivering network-centric communications for superior Command and Control.



L3Harris Launches Next-Generation Power Amplifier

L3Harris Technologies introduced a next-generation, software-defined power amplifier at the International Defence Exhibition and Conference (IDEX) 2021 in Abu Dhabi.

The L3Harris RF-410 NGPA maximizes mission flexibility and enhances tactical agility by eliminating the need

for multiple power amplifiers. It is lightweight and provides radio-agnostic capabilities and multiband support. The radio offers seamless access to networked voice and data, over the frequency range of 30-2600 MHz. Waveform coverage includes wideband and legacy narrowband communications.



U.S. Army Selects L3Harris' Enhanced Night Vision Goggle Technology

The U.S. Army has selected L3Harris Technologies' Enhanced Night Vision Goggle—Binocular (ENVG-B) to enhance Situational Awareness and increase soldier mobility and protection.

L3Harris received an initial \$18 million Other Transaction Authority (OTA) award from the U.S. Army for the ENVG-B Program of Record, which has a total value of \$442 million. L3Harris is one of two companies to receive initial funding under this OTA.

L3Harris Awarded \$233 Million to Support Key ADF Modernization Initiatives

The Australian Defence Force has awarded L3Harris Technologies contracts totaling \$233 million (USD) to deliver secure communications and advanced night-vision goggle technology to support the country's key modernization initiatives.

L3Harris was awarded a three-year, \$115 million follow-on FFP contract under the Direct Commercial Sale (DCS) arrangements for the Australian Defence Force's Delphic—Cryptographic Modernization program. L3Harris will deliver tactical radios, waveforms and ancillaries that support emerging cryptographic modernization standards.

The company also was awarded a \$118 million contract to provide advanced night vision goggle technology



“Partnering with PoliceGrantsHelp.com and FireGrantsHelp.com helps public safety and emergency response customers overcome purchasing challenges by identifying and providing grant assistance services. We’ve also created a dedicated lineup of L3Harris communications solutions to help them complete their missions.”

Nino DiCosmo
President, Public Safety and Professional Communications, L3Harris

L3Harris Helps Public Safety Agencies Access Grants For Critical Radio Technology

L3Harris has partnered with PoliceGrantsHelp.com and FireGrantsHelp.com to provide grant support to public safety agencies seeking funding to purchase the newest radio solutions.

PoliceGrantsHelp.com and FireGrantsHelp.com, part of

Police1.com and FireRescue1.com respectively, provide first responders access to a national database of available grants. Under this partnership, experts guide public safety customers through the grant process, including identifying available funds, applying for and helping to secure funding for the products they need. To date, the organization has secured more than \$250 million in agency grant funding.

to enhance army soldiers' ability to locate and engage threats—improving their Situational Awareness, mobility and safety. The award follows L3Harris' successful delivery of night-vision technology for Tranche 1 of the Land 53 program in 2020.

L3Harris will deliver its Fused Night Vision System (FNVS), which incorporates the latest in night vision capabilities—fusing image intensification technology with thermal imagery to provide soldiers with enhanced Situational Awareness, targeting and identification capability in all battlefield conditions and light levels. When combined with the L3Harris smart battery pack, the FNVS delivers critical battlefield information directly to the soldier's eye.

Both contracts include full in-country support and repair capabilities in Australia.



THE FUTURE BATTLEFIELD NETWORK'S HUB



Ready to ship in May, the new L3Harris Falcon III® RF-7850D Multi-channel Modular System is the world's first three-channel, triple-crossband radio in a third of the size of comparable solutions.

National defense organizations will soon have available a true hub for the connected battlefield network—a system that bridges legacy tactical waveforms to new and emerging ones, and links operators at the edge of the battlespace to decision-makers across the echelon with uninterrupted, resilient communications.

Smaller, more-powerful and with general capabilities and a waveform library far more extensive than current offerings on the market, the L3Harris Falcon III® RF-7850D Multi-channel Modular System is the world's first triple-crossband radio, capable of operating from Very High Frequency (VHF) to S-Band.

REDUCED SIZE AND WEIGHT IN A POWERFUL RADIO

Roughly the size of a video gaming console, the RF-7850D is the smallest multi-channel modular system on the market with enough power to meet emerging interoperability and networking requirements in an ever-evolving operating environment.

Without a requirement for a shock rack or specialized mount, this low-Size, Weight and Power (SWaP) characteristic broadens its applicability for space-constrained vehicles and tight installation specifications.

The radio's low-profile design allows for easy-to-install upgrades for any form factor radio. Further, the associated power amplifiers detach from the radio, facilitating a variety of configurations if space is a concern, Ian Young, L3Harris Product Line manager, said.

"For example, we were approached with a need for a drop-in upgrade for the existing fleet of legacy radios," he said. "With the low profile of the RF-7850D, all we needed to incorporate were two L3Harris RF-410 power amplifiers with a lightweight rack for an easy-to-install, simple upgrade to meet the customer's needs."

Like the RF-7850D, the RF-410 Next Generation Power Amplifier was introduced at the International Defence Exhibition & Conference (IDEX) 2021 in Abu Dhabi in February. The NGPA has a software-defined architecture for fast upgrades to emerging and future waveforms and provides seamless access to networked voice and data, over the frequency range of 30-2600 MHz.

UNLEASHING THE 'POWER OF 3'

L3Harris is leveraging mature and field-proven capabilities from the Falcon III® RF-7850 family of radios to create a two-channel solution—with the flexibility to add an additional channel—in one compact system. Its first channel acts as the multiband backbone, providing the full RF-7850 waveform suite, with continuous coverage from 30 to 512 MHz, according to Young.

This first-of-its-kind approach effectively provides three simultaneous networks that can enable interoperability between generations of radio; three separate, non-competing channels; and all in a package three times smaller than comparable systems.

"The end user, on channel two, has a choice: they can either run another one of those channels, or they can push it up into the higher part of the spectrum for a more-data-centric application," Young said.

The system operates up to 2.5 GHz, spanning four bands of the electromagnetic spectrum.

This flexibility makes the RF-7850D the world's first triple-crossbanded radio. It can bridge existing RF-7850 products to Falcon II® solutions, airborne assets and legacy waveforms, including L3Harris' best-in-class offerings, further enhancing the suite of interoperable solutions.

The system forms the nucleus of the RF-7850 family of tactical radios, delivering full battlespace interoperability and a bridge for air-to-ground backbone networks through long-range, dual-channel communications. The RF-7850D supports faster, better-informed decisions through the seamless exchange of voice, data, images and Full Motion Video up and down echelon.

"The RF-7850D is the center of the battlefield network," Young said.

"It's able to bring all the L3Harris Type 3 radios together and make them interoperable. We wanted to make it simple to configure the radio with a lot of different choices. We can tie into the rest of the echelons with our RF portfolio."

EXPANDED CAPABILITY

The RF-7850D offers deployed teams with expanded connectivity options with L3Harris' Mission Module.

This plug-and-play add-on acts as a third channel with independent capabilities, allowing users to share more information.

“Out of the box, the RF-7850D is a two-channel modular radio, but you can extend its capabilities using the Mission Module,” Young said. “The mission module gives them more control on how they interface with the radio.”

Options for the Mission Module also include full-motion video or aerial Intelligence, Surveillance and Reconnaissance (ISR) data.

“The options are endless,” Young said. “It gives us the opportunity to go out to our customers and find out what’s important to them, then bring that capability and make it extendable into the RF-7850D platform.”

During the product’s unveiling at IDEX earlier this year, several commanding officers were interested in the RF-7850D following a “highly successful demonstration” in the region, according to Tim Soine, L3Harris Product Management director.

Many attendees noted how they could leverage the triple-crossbanding technologies, according to Soine, including one who said, “We can have one channel running our command net, a second channel for air support and the third channel mission module connecting to the edge soldiers, but bridge all the

Continued ➤

LEARN MORE ABOUT THE RF-7850D



 **3**
available
channels

 **3X**
smaller than
the competition

 **3**
simultaneous
networks

THE FUTURE BATTLEFIELD CONTINUED FROM PAGE 7



The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.

position reports into the command net with no bridge device—this is what we have to have in the command vehicles.”

Those who visited the booth were also impressed with the customization options of the mission module capability and the streamlined design of the product, he added.

ENHANCING PROVEN PERFORMANCE

Much of the RF-7850D’s interoperability capabilities stem from the premier performance from legacy solutions within its family of radios, tailored for the two-channel solution.

For example, the RF-7850 family of radios’ Web-based User Interface (WebUI) carries forward to the RF-7850D model; L3Harris engineers designed a new interface for simultaneous two-channel control, providing a unified operating picture, according to Brad Hall, L3Harris lead product analyst. Incorporating commercial edge device technology into a two-channel tactical soldier interface is a first for the industry, he added.

“We worked with engineers to develop the radio with functionality similar to a personal cell phone,” Hall said. “Managing it becomes much more intuitive when seconds count.”

In addition to the WebUI, the family’s Shared Situational Awareness and Blue-force Tracking capabilities are expanded for two-channel operations in the RF-7850D with a built-in WPAN side adaptor for WiFi and Bluetooth connectivity, Hall said.

L3Harris runs the RF-7850D through the same suite of product testing as its predecessors, but it includes more-advanced Electromagnetic Interference and Compatibility activities, he said.

“The further the military goes in its capability requirements, the more Electromagnetic Interference becomes a concern because of the amount of equipment that’s going into the vehicles,” Hall added.

Design engineers for the RF-7850D were also keen on developing common accessory interfaces for the radio and its counterparts. This is a trend Hall sees going forward for the company, as it lowers the cost for customers to transition to next-generation solutions within the radio family.

Work began in the start of 2018, when there was increasing market demand for an “international two-channel radio,” according to Soine. Soine and Hall were tasked with designing an L3Harris version that was as small and capable as possible.

The team, along with L3Harris International Sales personnel, met with customer stakeholders around the world and took their feedback to ensure the radio included key product requirements and specifications needed to make it a success.

For instance, one customer had focused his attentions on the Mission Module requirement; the customer related that if the system supported VHF/UHF channels with the added capability to connect secure personal radios through such a capability, it would be the “perfect solution” for their upcoming modernization effort, Soine said.

Following a week-long Kaizen between the RF-7850 Engineering team and sales, the final product was born—one that was three times smaller than the competition while providing three available channels and three simultaneous networks. |

FORCE MULTIPLIER

Effectively leveraging Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) assets across an area of influence is critical in maintaining sustainable sovereign defense postures.

With technologies for both defensive and offensive capabilities advancing at lightning speed, the strategic role of Situational Awareness has been elevated in recent decades. As such, government and military organizations, large and small, value reliability, resiliency and affordability when looking to advance

their capabilities in large, complex systems.

“We’re uniquely positioned as a mission solution provider,” Chris Aebli, president of L3Harris Global Communication Systems (GCS), said. “L3Harris has a large tactical radio install base and has introduced tactical networks to many of our international customers around the world. We are a world leader in tactical voice and data communications, cameras and sensor data, as well as battlement management systems design, integration, installation and support.”

Through the merger of L3 Technologies and Harris Corporation to form L3Harris Technologies, the new Global Communication Systems group can provide a full spectrum of national security capabilities in its product offerings with one point of contact for its customers.

“We now have access to a broader array of technologies and expertise in ISR and integrated systems,” Aebli said. “It’s a natural progression for us to be able to supply systems that are tightly integrated with tactical networking radios. It gives

Continued ➤

The merger of L3 Technologies and Harris Corporation has enabled the company’s newly formed Global Communication Systems organization to provide end-to-end solutions, meeting customers’ most-urgent needs.

FORCE MULTIPLIER

CONTINUED FROM PAGE 10

us a nice position to be able to provide some pretty unique, cost-effective solutions at the system level.”

L3Harris’ legacy companies have long-standing expertise and field-proven technologies to meet customer needs. The merger has strengthened the sector’s ability to lower the cost of ownership throughout the life of a system, according to Aebli.

The new GCS organization ensures reliability, resiliency and affordability of its products by leveraging L3Harris’ reputation as a trusted partner and the company’s decades of expertise in a wide array of multi-tier C4ISR communications solutions. Further, GCS Engineering teams are agile enough to focus on specific customer requirements. The organization has proved itself as a strong product integrator that can build local support infrastructure to bolster national sovereignty.

L3Harris’ extensive international partner network, and the experience and capabilities it brings to bear, allows the company to provide end-to-end solutions with fewer subcontractors and process layers, resulting in reduced cost and quicker unit delivery, he added.

GCS supports customers in identifying capability gaps, performing network design, equipment selection, system



L3Harris’ Global Communication Systems division designs complete systems of customized sensors, networking, hardware, software and communications technologies. GCS has mobilized its top scientists, engineers and experts to redefine, design, manufacture and rapidly deploy the most-capable VSATs on the market.

integration and testing—right through deployment, training, field service, maintenance and sustainment.

“We’re creating packaged solutions that provide flexible, scalable, quick-deployment vehicle and shelter systems to meet border security, observation and surveillance requirements,” Aebli said. “These mission solutions enhance the users’ battlefield Situational Awareness for every medium of military tactical communications.”

While the business is exploring opportunities in emerging border security, land Command and Control, intelligence operations and fire control markets, it is also enhancing its support for organizations with an increasing focus on building local capabilities and expertise. While this traditionally has been a maintenance and sustainment exercise, customers are looking for increased help in design

and development, according to Aebli. This necessitates a different plan during proposal processes to ensure adequate training courses are offered in areas such as electrical engineering and software design, as well as transfer-of-knowledge tactics. L3Harris’ foreign in-field support includes building facilities, hiring local employees and purchasing material in the country, further lending to its national sovereignty.

“Our commitment is that we will always spend the proper time upfront with our customers to understand what they really want to accomplish—we want to be a partner, not a supplier,” Aebli said. “It’s a commitment to quality, delivery, support, and, ultimately, our customer’s success. We’re going to provide high-performing systems—we’re not going to over-design them. We’re going to deliver on time, and then we’re going to be there to support them.”

GLOBAL COMMUNICATION SYSTEMS SOLUTIONS

L3Harris’ Global Communication business is a leading Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR) integrator for defense customers around the world. Based on tactical radio solutions, the sector’s capabilities span to sensors, soldier biometrics and other data sources to tie together the entire battlefield for personnel at the edge. They include leading-edge solutions to support militaries’ ability to gather, synthesize and act on real-time intelligence.

GATHER

Our solutions support agencies that need to monitor an entire border by using an array of integrated high-frequency sensors that gather and share data securely.

SYNTHESIZE

We transform sensor data into a better-informed Common Operational Picture to support informed decisions based on actionable intelligence.

ACT

Sovereign nations require mobilization of actionable intelligence across varied terrain and missions at a moment’s notice.

COVID-PROOFING CUSTOMER RELATIONS

No customer is willing to purchase a product without performing due diligence on its capacity to meet their needs, and military customers buying in bulk with national fiduciary and personnel safety responsibilities are no exception.

As the COVID-19 pandemic swept the globe, travel restrictions—combined with IT security concerns—created a complex environment in which L3Harris Technologies’ Sales teams needed to maneuver to bring nations the critical solutions they require.

“Our customers’ missions didn’t stop—COVID happened, but they still need to accomplish their mission,” Jake Williams, L3Harris Business Development director, said. “We could no longer fly in to meet them face-to-face, so we had to find new ways to demonstrate our capabilities.”

For example, in lieu of in-person demonstrations, L3Harris teams coordinated with representatives from various countries to provide virtual presentations that both fully demonstrated the capabilities of the company’s Integrated Tactical Area Communications Mobile Operations and Surveillance Shelter Systems (ITACS) and relieved customer concerns related to the security of telepresentations.

The two-fold solution was a Zoom-enabled demonstration and a two-minute product video. The demonstration allows customers to examine the shelter’s unique features at their own pace and discuss how to meet their specific needs.

The video provides context as to how the power of the new L3Harris enterprise could enhance the capabilities that ITACS provides in itself.

“The demo targets 80 percent of the needs for a lot of different end-users and we can talk to the remaining 20 percent,” Williams said. “It’s general enough so that we can apply it to many different users. It’s also one of the first demonstrations we’ve been able to do as L3Harris that shows our cross-segment capabilities.”

This tactic allowed participants to see operators responding to their real-time commands and the systems’ interfaces. According to Williams, this gave some of the decision-makers a closer view of the product than they would normally see only if some team members traveled to the United States for an in-person demonstration. Additionally, these meetings allowed discussions around mission requirements to be addressed so the company can provide tailored offerings to customer needs when in-person meetings do take place.

“They didn’t realize these disparate solutions were ready to go today and integrate as a full network,” Williams said. “The demo gives them intimate, crucial knowledge that the system is ready to go at least 80 percent, and that gives them confidence that we’re the people they should trust to deliver their mission capabilities.”

In the future, Williams sees L3Harris continuing to use virtual meeting capabilities, because it allows more company experts to participate in customer engagements, provide more insight about particular capabilities and design customer-tailored solutions faster. |

STRENGTHENING SATCOM

Like GCS, L3Harris Communication Systems’ Satellite Communications (SATCOM) products division has embraced the benefits of the merger. The division provides very small aperture terminals that provide high-bandwidth, Beyond-Line-Of-Sight data to military forces and federal agencies worldwide, including U.S. Federal Emergency Management Agency, Southern Command, Marine Expeditionary Units (MEUs), U.S. Army and the Army National Guard.

The division now has access to more technological expertise as a result of the merger and is making significant investments to enhance the performance of its products to keep end-users safe while performing their duties.

“I think [the merger] completes the whole picture,” Jerry Adams, SATCOM products division general manager, said.

“No one understands tactical radios better than the legacy Harris business within L3Harris, and this legacy L3 group leads the market in deployable SATCOM. Now, as we pull this together, we are able to leverage the same customers on the SATCOM side that we had on the tactical radio side. L3Harris has a unique footprint, and we deliver solutions across the entire spectrum, where most of our competitors don’t have that full product portfolio that can allow you to do that.”

L3Harris’ international footprint enables the company to grow the business in other markets where it already has a strong foundation in certain specialties, Adams added.

“The merger has allowed us to leverage advanced technologies across multiple businesses,” he said. “This allows us to deliver complex, integrated end-to-end solutions that would previously not have been possible.”

L3Harris technology and product roadmaps ensure alignment among investment, customer needs and the quickly evolving battlespace, Adams added. The SATCOM Products group is uniquely positioned to deliver emerging capabilities customers desire, including protected waveforms to counter near-peer threats, and secure access to Low- and Middle-Earth Orbit constellations.

“We promise to stand behind our products and drive our technology roadmaps to meet the mission requirements of our customers,” he said. “Part of that is we have to spend time with our customers. Customer intimacy is extremely important.” |



**LEARN MORE
ABOUT OUR SATCOM
TECHNOLOGY**

PIONEERING NIGHT VISION'S NEXT FRONTIER

L3Harris' next-generation night-vision solutions fuse white phosphor tube and thermal-imaging technology to provide the most-advanced Situational Awareness for soldiers at the edge of the battlefield, regardless of weather or light conditions.

During a light-starved night, with no moon and cloud-obscured stars—that is when the superiority of L3Harris Technologies' night-vision tube performance is time-proven.

With the advantage that L3Harris Technologies' gear provides, U.S. forces are able to take down an entire defensive force—even against armed guards with night-vision goggles—before they know anything happened.

“We have the highest-performing tubes in the world—the best imaging, the highest reliability,” Tom Horwath, L3Harris director of Business Development, said. “We can justify it with data where others can't. That, and the fact that the world's most-elite forces prefer our equipment, is testament to their quality.”

L3Harris engineers and manufactures the industry's only unfilmed Gen III Image Intensification tubes. Each year, the company ships tens of thousands for ground, aviation and weapon-mounted systems to government, military and law enforcement customers worldwide.

“We listen carefully to our customers to determine their needs,” Horwath said.

For example, company representatives have worked directly with U.S. Army end users over the last two years to evolve Enhanced Night Vision Goggle – Binocular (ENVG-B) design elements to ensure the solution is optimally suited for the soldier at the edge of the battlefield. Since 2018, L3Harris has delivered more than 4,500 combat-ready systems under the program's \$391 million Directed Requirements contract.

“Our customers want overmatch and mobility,” John Burnsed, L3Harris director of Engineering and Design, said. “Our devices are so sensitive, on the darkest of nights you can have great Situational Awareness through hi-res images. You understand the world around you faster through what feels like a daytime environment.”

IT ALL COMES DOWN TO PHYSICS

The unfilmed tubes, miniaturization of critical tube components and white phosphor advances are keys to improving customer capabilities. All of these technologies are achieved through materials engineering bordering on applied physics.

Burnsed says physics touches “every discipline at our tube manufacturing center in Tempe, Arizona — our specialty glass process, the optics. We manipulate matter at the atomic level every day.”

Key breakthroughs in L3Harris' designs include advances in spacing requirements between the components' photocathodes and Micro Channel Plates, according to Burnsed.

L3Harris tube components are closer together and have a finer pitch for higher resolution, reduced halos and delivery of a much higher-quality image. The team has increased tube Figure of Merit (FOM) performance by 50 percent in the last five years, according to Horwath.

“The higher the FOM number, the more precisely operators can detect and identify targets,” Burnsed said. “You want a great level of sharpness and image stability without distortion.”

When the unrivaled FOM clarity and durability L3Harris tubes provide are combined with thermal-imaging technology, as is the case with ENVG-B, soldiers are equipped with the most-



**See ENVG-B
in action**

advanced Situational Awareness goggle on the market today. Benefits of this fused technology include flexible 40-degree Field-of-View with options of white-hot, black-hot and outline modes, as well as precision targeting and identification capabilities in all battlefield conditions and light levels.

Next-generation advances in display technology, such as the incorporation of Augmented Reality in solutions including ENVG-B, enhance soldiers' effectiveness further by allowing them to keep eyes on target without having to look down to read maps or check radios for critical information.

L3Harris also spearheaded the effort with the U.S. government to nearly double gain level, bringing more light into goggles and sights. Burnsed said L3Harris is "now offering over 100,000 gain, which is significant for the user's ability to maintain image resolution in ultra-dark conditions, validated with Department of Defense (DOD) technical experts at the Night Vision and Electronic Sensors Directorate in Fort Belvoir."

As L3Harris works with DOD to upgrade 10-to-12-year-old aviation goggles, Horwath says L3Harris white phosphor tubes will boost performance by 50 percent.

"Horizontal wires are very concerning for helicopter pilots," he said. "We're getting reports that pilots in the same aircraft are having different results with white and green phosphor. For example, the one pilot wearing the white goggle with our tubes can see the wires seconds before the pilot right next to him wearing the green goggle—which, if you're flying low and fast, is a big deal."

Another customer advantage is the ability of L3Harris tube systems to operate for up to 30 hours on a single AA battery, and, according to Burnsed, unmatched reliability.

Many continue to falsely claim that unfilmed tubes have poorer gain life than

filmed tubes, but this has been proven definitively wrong in U.S. government contract-mandated testing for many years.

"We have never run them long enough to make them fail," he said. "In fact, we have a growing body of data that shows the unfilmed tubes have longer gain life than the filmed tubes, making them more robust to high light exposure regularly seen in mixed, urban environments."

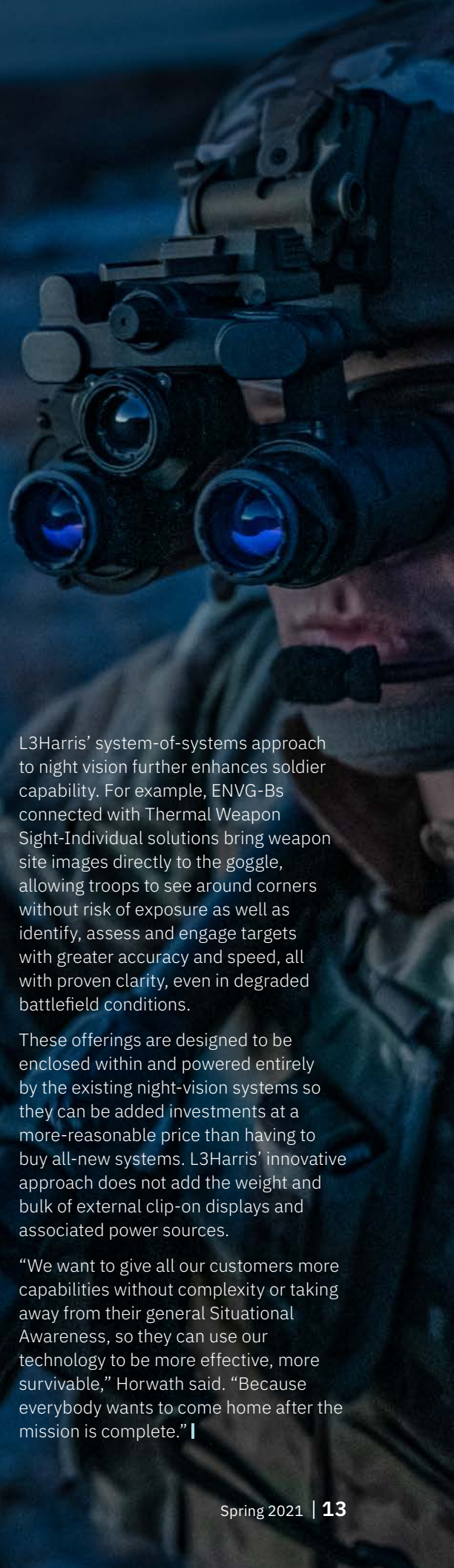
CUSTOMER-DRIVEN FUTURE

The most important role of a night-vision goggle is to ensure the warfighter can see in the dark. L3Harris continues to demonstrate the critical role image intensifier technology plays to enhance Situational Awareness and provide full complementary advantage to sensor fusion, improving real-time mission capability for the warfighter. Despite the expanded roles and capabilities enabled by L3Harris' technological improvements, traditional analog technology also ensures continuity of operations if the warfighter is disconnected from the network.

L3Harris will continue to drive its quality and reliability to benefit customers, with higher FOM, better resolution and sensitivity, according to Burnsed and Horwath. This level of ultra-low light sensitivity and resolution remains unmatched by all current and proposed digital technology approaches.

L3Harris has been focused on integrating displays to enable information sharing, without sacrificing the capability the tubes provide, by creating a portfolio of overlay display capabilities that can be tailored to the varying needs of each warfighter. The newest L3Harris tube has a monochrome peripheral overlay display with information covering 10 percent of the top center of the goggle's view.

"They can see their direction, heading, location of team members," Burnsed said, "and get texts and maps."



L3Harris' system-of-systems approach to night vision further enhances soldier capability. For example, ENVG-Bs connected with Thermal Weapon Sight-Individual solutions bring weapon site images directly to the goggle, allowing troops to see around corners without risk of exposure as well as identify, assess and engage targets with greater accuracy and speed, all with proven clarity, even in degraded battlefield conditions.

These offerings are designed to be enclosed within and powered entirely by the existing night-vision systems so they can be added investments at a more-reasonable price than having to buy all-new systems. L3Harris' innovative approach does not add the weight and bulk of external clip-on displays and associated power sources.

"We want to give all our customers more capabilities without complexity or taking away from their general Situational Awareness, so they can use our technology to be more effective, more survivable," Horwath said. "Because everybody wants to come home after the mission is complete." |

THE LEADING EDGE OF TACTICAL RADIO MODERNIZATION

L3Harris' newest communications and network system recognizes that missions demand speed and agility. The Falcon® 4 AN/PRC-167 multi-channel manpack ensures resilient connectivity no matter what the mission, and software upgradeability for emerging needs.



Falcon® IV Next Generation Tactical Communications (NGTC) family of radios

L3Harris Technologies is providing Special Operations Forces (SOF) more network connectivity, global interoperability, Situational Awareness and resilience than ever before.

The AN/PRC-167 Next Generation Manpack is a new L3Harris Software Defined Radio in the company's next-generation Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) family of systems. Leveraging decades of tactical communications support for the U.S. warfighter, this product line provides the most-interoperable and capable system in the world, creating a complete ecosystem of leading-edge C4ISR capabilities with resilient capabilities against near-peer threats.

"Special Operations Forces are constantly pushing boundaries to execute their missions with greater stealth and speed," Dana Mehnart, L3Harris Communication Systems president, said. "The AN/PRC-167 provides situational understanding between the tactical edge and command elements, allowing cognitive overmatch in any operational scenario."

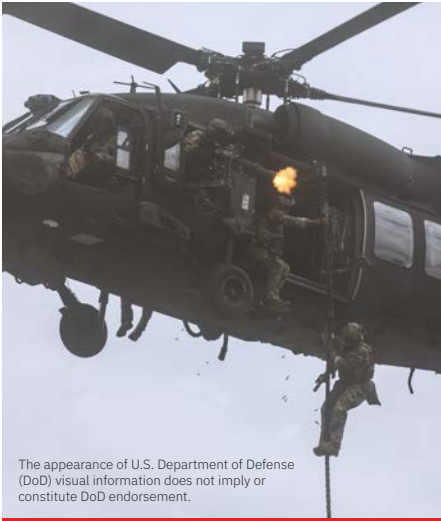
As part of the Falcon® IV family of tactical radios, the AN/PRC-167 shares the same interface as other products within the family, including the AN/PRC-163 multi-channel handheld radio. This commonality speeds deployment by minimizing training time and, further, reduces sustainment costs via compatible cables, connectors, batteries and accessories.



Learn more about the AN/PRC-167



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“Special operations are making significant modernization advancements. Hyper-enabled teams address the toughest problems our operators will face at the most fundamental level: how they shoot, move, communicate, and survive in highly contested environments. Organic capability is what we will need to fight mobile, independently, and disaggregated. We must be able to process a large amount of real-time information and deliver precision organic fires all while staying undetected. We are investing in low-probability of intercept and detection high bandwidth resilient communications networks ... and any technology that minimizes our signature or provides ‘digital camouflage.’”

Lt. Gen. Francis Beaudette

U.S. Army Commanding General, United States Special Operations Command, before the Senate Armed Services Committee Emerging Threats and Capabilities Subcommittee, April 28, 2021

Since October 2020, the company has received more than \$150 million in USSOCOM AN/PRC-167 orders as part of the Indefinite Delivery/Indefinite Quantity (IDIQ) contract under the Next Generation Tactical Communications (NGTC) program. In addition to the AN/PRC-167 contract, USSOCOM awarded the company an IDIQ contract for Falcon® IV AN/PRC-163 multi-channel handheld radios.

In November 2020, the U.S. National Security Agency granted L3Harris Type-1 certification for the AN/PRC-167.

The initial U.S. Defense Department AN/PRC-167 concept was a two-channel crypto-modernization replacement to the combat-proven AN/PRC-117G. SOF customers also sought enhanced Mobile Ad-Hoc Networking (MANET) capabilities to power tactical mission networks.

“Their vision was for multiple functions and channels, embedded into a single system,” Robert Gnam, L3Harris USSOCOM Team lead, said. “We set out to accomplish several ambitious goals: integrate multiple devices into one to reduce weight and increase interoperability; add data routing and high-speed MANET networks; create crossbanding and gateway functions to connect networks together; and innovate a flexible mission module concept.”

INDUSTRY-LEADING TECHNOLOGY

One of the key advantages of the AN/PRC-167 is access to two channels,

operating anywhere from 30 MHz to 2.6 GHz, with similar Size, Weight and Power of the AN/PRC-117G, John Serio, L3Harris Product Line manager, said.

“These are very frequency-agile receivers,” Serio said. “Further, we have a very impressive waveform library. The waveforms themselves are the tools the customer uses to communicate, enabling them to pick the right tool for the job with the turn of a knob.”

The AN/PRC-167 is also the first multi-channel manpack radio that is software upgradable and features mission-specific adaptability through a mission module. This feature opens opportunities for rapid software upgrade transitions for emerging capability requirements.

“The mission module now allows the user to easily add on new, emerging or niche technology by creating a mobile phone-size device that does exactly what you want,” Gnam said. “You plug it into the port on the radio and it behaves as if you added a third channel.”

These modules can extend beyond specifically communications, to include additional processing, data routing, interfacing or Full-Motion Video capabilities, Serio added.

“The value of the mission module is that it allows the radio to evolve with the customer,” he said, noting L3Harris radios provide Type 1 security to the modules. “As their needs change, the radio can change, so they don’t have

to reinvest in a new platform. It keeps the interface familiar, so there’s a lot less retraining. You can deploy multiple mission modules to adapt the radio to the mission. There’s a lot of flexibility in this model, and it provides a lot of advantage for the customer and the end user.”

In addition to the three-channel capability when including the mission module and L3Harris’ extensive resilient waveform library, the AN/PRC-167 provides built-in PACE (Primary, Alternate, Contingency, Emergency) capability. This enables operators to adapt among communications alternatives as needed – from MANET networks, to resilient MANET networks, to multiple LOS and SATCOM alternatives. The AN/PRC-167 also shares a new and easy web user interface (WebUI) with the AN/PRC-163.

LOOKING FORWARD

The AN/PRC-167 — with software-defined, hardware-enabled flexibility — is gaining momentum and acceptance in various programs, from dismounted users to maritime operations in addition to integration activities on ground vehicles and rotary- and fixed-wing aircraft. Further, L3Harris’ deep and broad technology enterprise enables standards-based, interoperable, end-to-end solutions for all customers.

As customers realize the full potential of the product and its application to a variety of missions, “the AN/PRC-167 will play a central role in the vision for the resilient network of the future,” Gnam said. |

TAG: BRIDGING THE BEST OF COMMERCIAL AND DEFENSE SOLUTIONS

L3Harris' innovative Transport Aggregation Gateway ensures mission-critical communications by providing end users access to a swath of integrated Commercial and Military Satellite communications solutions—from LTE/5G and Line-Of-Sight radio to SATCOM—to complete their missions.



TAG Gateway Remote Terminal

The U.S. Department of Defense and partner forces around the world are set to benefit from a game-changing technology employed by television networks to ensure the highest quality in coverage of the Super Bowl and Olympic Games.

L3Harris Technologies has partnered with connectivity specialist Dejero to offer Transport Aggregation Gateway (TAG) software, which ensures mission-critical armed forces communications across the modern battlespace—including denied or degraded Command-and-Control environments.

TAG solves a critical capability gap that has been plaguing expeditionary units for decades, according to Shane Sims, L3Harris product director.

For years, Tactical Operations Centers would have several disparate satellite terminals operating at the same time, without interconnections to perform tasks such as load-balancing. As operators' thirst for data increases, and as adversaries enhance their ability to limit, deny or jam communications, the strain on integrated tactical network infrastructure intensifies in kind.

In a vision statement released last year, Gen. Jay Raymond, head of both U.S. Space Force and the U.S. Air Force's Space Command, stated: "Adversaries understand the advantage SATCOM brings our warfighters and are working to deny, degrade and destroy these capabilities."



The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.

“The single, integrated SATCOM enterprise will enhance integration between the military and private sectors, with a goal to enable warfighters with the ability to transition between their networks and terminals to alternate resources with little or no disruption,” the statement continued.

The Transport Aggregation Gateway now offers that capability.

TAG IN

The L3Harris solution is based on commercial technology originally designed for mobile news teams covering major sports events, providing them with a unified gateway that enables multiple transmission paths across satellite, cellular—3G, 4G and 5G—and Line-Of-Sight (LOS) communication networks.

Enabled by Artificial Intelligence and Machine Learning algorithms, TAG features Smart Blending Technology (SBT), designed to deliver dynamic load balancing, enhanced quality of service and multi-path diversity to warfighters operating in contested environments.

The physical footprint includes the TAG Gateway Remote Terminal, tasked with the management of inbound data links, applying SBT to determine optimal network routes for outbound data flow.

The TAG Concentrator also exploits SBT algorithms to aggregate traffic across multiple networks to ensure maximum levels in data throughput.

“There’s no requirement to reconfigure anything,” Sims said. “TAG takes advantage of all available bandwidth or throughput across disparate networks, no matter which vendors are supplying them.”

By utilizing all available communications links simultaneously, TAG automatically



L3Harris’ Transport Aggregation Gateway (TAG) is based on commercial technology originally designed for mobile news teams covering major sports events, providing them with a unified gateway that enables multiple transmission paths across satellite, cellular—3G, 4G and 5G—and Line-Of-Sight communication networks.

optimizes capacity by providing network resiliency and elasticity as communications systems join or leave the network, he added.

“This commercial technology has now progressed to a point where it has become something useful to the DOD,” Sims said.

Following a successful proof of concept to the U.S. Army in December 2018, L3Harris has made a series of modifications to TAG in order to optimize its deployment across the armed forces.

Upgrades included the introduction of a special algorithm to “smooth out” varying latency levels witnessed across different communications networks.

“When satellite links either degrade or break, TAG will adjust the traffic to the remaining links to ensure the Soldier never loses connectivity,” Tyler Cook, Managed Multi-Orbit SATCOM lead for Product Lead Unified Network Capabilities and Integration, Project Manager Tactical Network, under PEO C3T, said in a service statement. “If the

user is linked using LEO and the signal becomes degraded or jammed, the capability will switch you to MEO, and then if needed to GEO.”

Describing TAG’s application across the modern battlespace, Sims illustrated a specific scenario that involved an early-entry expeditionary force experiencing limited levels in connectivity as low as 256 kbps.

“As the campaign progresses, more and more capabilities show up, and they build up over time,” he said, “and, in the past, some of the lower-end capabilities would be put away, and the communications were very much stovepiped, or they’d all be used and some users would be disadvantaged.”

Today, TAG can aggregate and blend together the various data capacities of multiple networks—meaning there are no longer any disadvantaged user sets across the battlespace. A single data stream exploits multiple network links simultaneously to ensure maximum levels in data throughput.

Continued ➤



The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.

TAG automatically optimizes capability by providing network resiliency and elasticity as communications systems join or leave the network via its enhanced algorithmic Smart Blending Technology, delivering dynamic load balancing, enhanced quality of service and multi-path diversity.

“Take a SpaceX Starlink terminal for example, you’re going to add into the TAG network an additional 100 mbps with very low latency, thereby providing an even greater capability when aggregated with other existing tactical networks in the battlespace,” Sims said. “No reconfiguration of end-user devices is required. Instead, devices just need to be plugged into the gateway.”

TAG can support a variety of combat roles, supporting mounted and dismounted teams in addition to tactical operations centers. For instance, TAG has been integrated on U.S. Special Operations Command MRZR Light Tactical All-Terrain Vehicles as part of a demonstration.

CONTESTING THE CONTESTED ENVIRONMENT

“Diversity in transport channels, for both intra-theater and inter-theater communications...delivers capabilities needed by customers to operate in a contested electromagnetic (EM) environment,” according to recent white

paper released by U.S. Transportation Command’s Joint Communications Support Element. “Transport diversity requires an appropriate combination of military satellite communications (MILSATCOM), commercial satellite communications (COMSATCOM), tropospheric communications, LOS communications. Integrating multiband, multi-path, and multi-technology transport channels...ensures a degree of resiliency necessary to support JFHQ D2C2E operations.”

One of the greatest assets of TAG’s SBT is in its support of tactical communications in contested environments where connectivity can be disrupted by enemy forces, according to Ray Lindenmayer, L3Harris Business Development director.

“If one of the networks gets knocked out by a jammer, communications can be maintained, because TAG is automatically rerouting traffic to the other operational transports using SBT,” Lindenmayer said. “This is called

transport diversity, which means, if a unit is being jammed by enemy forces, they can still use alternative communications paths to fulfill their mission.”

L3Harris has conducted more than 20 demonstrations for the U.S. Army, Marine Corps, Special Operations Forces, Customs and Border Protection agency, as well as the White House.

TAG is also expected to support the Army’s NetModX Exercise and Project Convergence, which is concerned with leveraging Artificial Intelligence and Machine Learning to optimize battlefield management systems.

“As new equipment comes online, it’s the ease of integration with TAG that is critical,” Lindenmayer said. “Warfighters want a guaranteed service, just like you do at your home right now through cellular network providers. We’re going to offer the same thing to the military—they just need to tell us how much bandwidth they need. This SATCOM-as-a-Service concept is the big requirement we’ll see arising out of the Army in 2023, and I believe that TAG is a critical component to that service. We are in a unique position to actually be able to deliver on the vision that the military wants.”

GATEWAY TO THE FUTURE

L3Harris hopes to deploy TAG across four U.S. Army Brigade Combat Teams in 2022 as the company continues to upgrade the capability further in the future.

L3Harris is also looking to upload TAG software on its smaller handheld and manpack Software Defined Radios, such as the AN/PRC-163 and -167 models designed specifically for the U.S. Army and Special Operations Command.

“Part of the development roadmap is to push the technology down to the tactical edge,” Sims said. |

THE STRENGTH OF ENTERPRISE IN AUSTRALIA


The enterprise-wide inventory of L3Harris solutions provide an accelerated path toward sovereignty and coalition partnerships for the Australian Defence Force.

After two decades of extensive engagement in counter-insurgency campaigns in Iraq and Afghanistan, the Australian Defence Force (ADF) is repivoting its strategic interests back to the Asian-Pacific region.

As part of a wider effort across the region to ensure security and stability, the Australian Army is upgrading its ability to conduct expeditionary operations against peer and high-capability adversaries. Critical to this endeavor is the “Accelerated Warfare” concept, which will enable the force to quickly adapt to emerging threats across

contemporary and future operating environments, according to Chief of the Australian Army Lt. Gen. Rick Burr.

The Australian Army is open to adopting new capability and concepts across a variety of areas, including “human performance; information advantage; cyber; data; smarter and smaller distributed systems; [and] robotic and autonomous systems,” Burr wrote in 2020. “Together, these actions will enable [the] Army to prepare more teams, for more tasks, more often to meet the demands of Defence Strategy.”

Continued 



LEARN MORE ABOUT L3HARRIS SOLUTIONS IN AUSTRALIA

THE STRENGTH OF ENTERPRISE CONTINUED FROM PAGE 19

NEW CAPABILITIES FOR THE ADF

L3Harris Technologies is already playing a critical role in supporting the Australian Army, as it recently concluded the five-year Land 53 Tranche 1 contract to deliver innovative targeting and detection capabilities designed to perform at night and in all weather conditions against peer adversaries. L3Harris Technologies' Integrated Vision Solutions (IVS) sector is a subcontractor to the program, led by L3 Mission Systems Australia.

Land 53's Tranche 1 capabilities are already fielded and have been "well received" by the customer, providing a "significant step change in capability for the land forces," according to Lynn Bollengier, president of L3Harris' IVS business.

"In terms of army modernization of the soldier as a platform, Tranche 1 is the first real step in giving them the ability to fight in all conditions," Bollengier said, noting upgrades can be used with the Army's EF88 assault rifle.

ALL-WEATHER SOLUTIONS

L3 Technologies' merger with Harris Corporation in July 2019 has opened a magnitude of next-generation

capabilities to the Australian Army and the wider Australian defense community.

The company was recently awarded Tranche 2 of the Land 53 program. The program aims to provide the army with "augmented, supplemented and/or enhanced" night-fighting capability. Under the contract, L3Harris will deliver its Fused Night Vision System (FNVS), which fuses image intensification technology with thermal imagery to provide soldiers with enhanced Situational Awareness, targeting and identification capability in all battlefield conditions and light levels. Combined with the L3Harris smart battery pack, the FNVS delivers critical battlefield information directly to the soldier's eye.

The program's Final Operational Capability is expected to be declared in September 2023.

"With this added capability, soldiers will know where they are and where they are heading using an individual heads-up display illustrating direction and location information," Bollengier said, noting the Australian Army continues to closely monitor another program contracted to L3Harris, the U.S. Army's Enhanced Night Vision Goggle—Binocular (ENVG-B).

"A thermal imaging overlay will also allow soldiers to identify targets and teammates through obscurants."

L3Harris is also primed to support Phase 2 of Land 53, which will be focused on the sharing of Situation Awareness data at the tactical edge. Due to begin in the 2024-2025 timeframe, Phase 2 will support the sharing of data across the battlefield, enabled by the Army's Land 200 tactical network program.

"L3Harris is positioned to enable this capability ahead of schedule simply due to the leading-edge capabilities we are already providing to the Australian Army," Bollengier said. "As you look across the entire breadth of the company, L3Harris Technologies has a lot of complimentary business in Australia. As a result, the Army has tracked key developments and engaged with us regularly, meaning we are able to share with them our roadmap of ideas of interest to the Commonwealth of Australia. This yields good cooperation to engage in the 'art of the possible' discussions."

Under Phase 2 of Land 200, the company is delivering AN/PRC-158 and AN/PRC-163 multiband and AN/PRC-160 wideband High Frequency Software Defined Radios to supplement in-service AN/PRC-152, AN/PRC-152A, EPLARS and AN/PRC-117 tactical radios.

ENHANCED SATCOM SUPPORT

Satellite Communications (SATCOM) capabilities are also critical to supporting emerging expeditionary warfare requirements of the Australian Army.

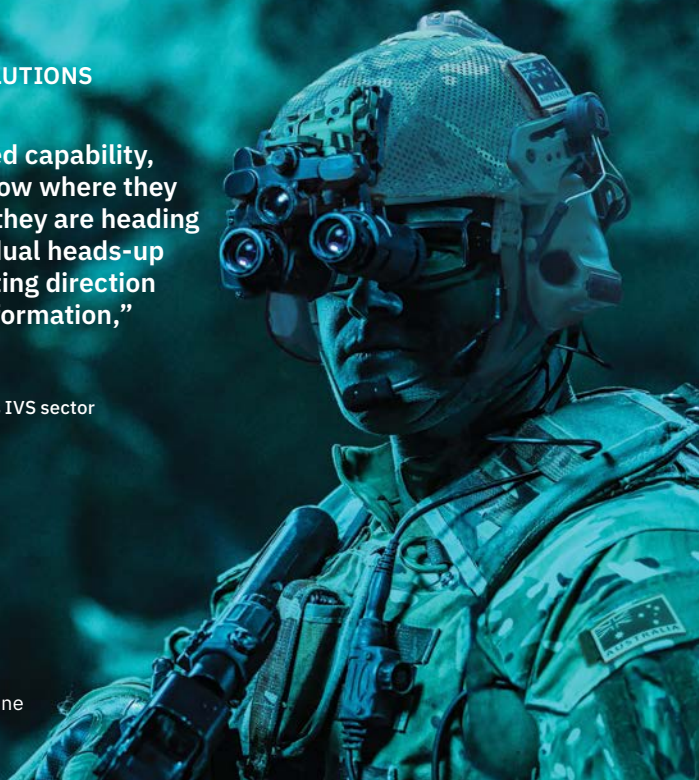
The company continues to support the Joint Project 2008 (MILSATCOM) program, work which includes providing and sustaining several hundred Hawkeye III Lite 1.2m Triband Very Small Aperture Terminals (VSATs).

"L3Harris provides and sustains a number of SATCOM products, including land transportable SATCOM terminals," an Australian Department of Defence spokesperson said. "The technical

ALL-WEATHER SOLUTIONS

"With this added capability, soldiers will know where they are and where they are heading using an individual heads-up display illustrating direction and location information,"

Lynn Bollengier
President
L3Harris Technologies IVS sector



competence of Australian industry to support these systems and maintain responsiveness and agility will be critical to meeting ADF needs. In-country training and deeper-level maintenance will be major contributors to the delivery of SATCOM capability.”

Meanwhile, the ADF is considering further enhancements to its SATCOM capability over the course of 2021 and 2022. Australian Special Operations Command (SOCOMD) procuring VSAT technology could provide an ideal solution for the future requirements of the Army, according to Jerry Adams, general manager of L3Harris’ SATCOM product division.

The company has already delivered dozens of Panther II 96cm VSATs to the SOCOMD as part of Project Greyfin.

“Greyfin positions itself perfectly as a natural connection for the Australian Defence Force, with VSATs providing backhaul for ground radios, which fits together with legacy handheld and manpack radios,” Adams said.

L3Harris’ smallest VSAT, Panther II, provides 4-6 MB throughput across X, Ku and Ka frequency bands. Featuring optional one-touch auto-acquire capabilities, Panther II VSATs are available in 60-cm and 96-cm aperture sizes, both featuring enhanced stability through a low center-of-gravity design.

L3Harris’ Hawkeye 4, which has already been selected by the U.S. Army, is a lighter-weight variant of the Hawkeye III terminal. Capable of being carried in a pair of

75-pound cases, the upgraded Hawkeye provides the same levels in capability and data throughput in addition to enhanced network resiliency to support emerging requirements across the contemporary operating environment.

Additionally, the company is exploring how Low Earth Orbit (LEO) satellite constellations might also support the future ADF SATCOM requirements. Ongoing work includes the development of LEO upgrade packages for VSATs and developments in Active Electronically Scanned Array (AESA) flat-panel designs.

Examples include L3Harris’ “Darkwing” flat panel Ka-band transceiver, already selected by U.S. Special Operations Command. This 20-pound solution provides Special Operations Forces with a “tremendous data capability, which is particularly applicable to the Australian market,” according to Adams.

The company remains engaged with original equipment manufacturers regarding the ADF’s next-generation JP9102 SATCOM program, which will replace JP2008.

Also referred to as the “Australian Defence SATCOM System,” JP9102 will provide a sovereign and game-changing SATCOM solution with enhanced efficiency and operating capability, including greater levels in assurance and more-rapid dissemination of data.

An enhanced SATCOM capability also presents exciting potential for Australian Army units operating at the tactical edge.

“There is real requirement to provide a flexible and adaptable SATCOM solution to enable persistent data from the edge to the tactical operations center,” Alan Callaghan, president and managing director of L3Harris Communications Australia, said. “We have recognized that requirement, from the U.S. Defense Department and within Special Operations Command, to take ISR videos from multiple Line-Of-Sight and Beyond-Line-Of-Sight sources and



integrate them to end-user devices via Software Defined Radios.”

IN-COUNTRY SUSTAINMENT

The L3Harris Communications Logistics Centre provides the Australian Army with in-country customer support, thereby significantly reducing lead-in times for maintenance, repair and overhaul of equipment. The 100,000-square-foot facility in Brisbane is equipped to support classified work; ongoing work includes sustainment of the Army’s inventory of legacy tactical radios and VSAT terminals.

This means radios and other equipment do not need to be repatriated to the United States for repair, providing a more-responsive capability to support any urgent operating requirements of the Australian Army.

“The provision of availability-based contracts allows more certainty to support an Australian sovereign capability and enhance their tactical communications operational readiness,” Callaghan said.

LOOKING FORWARD

ADF’s selection of L3Harris will significantly reduce risk and exposure while also ensuring unseen levels of interoperability with partner forces across the Indo-Pacific area of responsibility.

The company’s experience in night vision, tactical connectivity and SATCOM—in addition to the establishment of the Logistics Centre—presents an attractive and achievable one-stop solution for the Australian Army and wider ADF as they strive to secure the Asia-Pacific. |



L3Harris Panther II VSAT

THE POWER OF PARTNERSHIP

L3Harris Public Safety and Professional Communications customers have the combined strength of the company's full catalog of solutions and local service support through its two-tier distribution model and partnerships with its indirect channel dealers.

Not all radio customers represent big organizations, making thousand-unit purchases at a given time. Further, not all users have general capability requirements that can be addressed by equipment straight out of the box.

Even as one of the largest radio solutions providers in the world, L3Harris Technologies can meet the needs of organizations however large and small through its indirect channel partners.

L3Harris' Public Safety and Professional Communications (PSPC) business has a direct-to-customer salesforce comprising dozens of employees and 200 reseller channel partners, according to Todd Perdieu, L3Harris North American Indirect Sales director.

"The true value of the indirect channel is the local presence that essentially extends the reach of L3Harris to our customers," Perdieu said. "We offer world-class radio solutions, and often times our customers benefit from the expanded skill set of our partners.

Our local dealers become integrators of L3Harris technology into the customer environment, giving it a personal touch, knowing that the L3Harris technology will be used to protect their own community. Having a local L3Harris indirect channel partner brings tremendous value to L3Harris customers."

As an extension of L3Harris, the dealers provide a high grade of service and extend the ability for the company to connect with customers. The company's relationships with its dealers are critical

to enable partners for speed, efficiency and local service to meet urgent customer needs.

"There's certainly a significant amount of trust required to have a high-functioning channel," Perdieu said. "The culture that we've achieved in our channel is based on years of business relationships and building connections to best serve our customers."

SUPERIOR SOLUTIONS

Product quality and assured service support are table stakes in building customer trust. It's a whole new ball game to earn and sustain that trust when you partner with the U.S. Intelligence Community, like Superior Communications Inc. of Rockville, Maryland.

Product suppliers for the Intelligence Community work within what is known as the "Trusted Workforce," and it takes more than simply having the best products to enter into that select group, according to Superior Communications' vice president of DOD and Intelligence Community Programs, David Tievy.

The key to Superior's success has been spending a lot of time with specific teams and meeting their exact requirements, as well as being available whenever their customers need them, he said.

"The customer knows they can make a phone call if they need 10 radios, and we've got them in stock, and I'll make sure that mission gets supported before we even have a contract," Tievy said.

Superior Communications has seen its business opportunities grow since the L3Harris Technologies merger due to the expansion of solution sets the new organization provides.

"The merger opens up the product basket for us," Tievy said. "We work with groups who need night-vision solutions, or ViaSat communication terminals for their mobile command centers. They start to rely on us as a one-stop shop."



LEARN MORE ABOUT SUPERIOR'S STORY

ADDING END-USER VALUE

The dealer network can leverage the credibility of the L3Harris brand, but end users also benefit from niche capabilities and local support from the dealers themselves, according to Perdieu.

While PSPC employs direct sellers for Public Safety, Utility, Federal and International customers, it also has had for decades a North American indirect channel model to open opportunities for smaller organizations to access to the company's leading-edge technology.

The company conducts due diligence before entering into an indirect seller agreement to ensure the partner is the right size, has the adequate technical, service and sales capabilities and aligns with L3Harris' strategic approach and high-end market customer base. Strong



LOOKING FORWARD AND OUTWARD

While L3Harris and its dealer network serve customers globally, the company is looking to expand its reach into other urban communities, including Dallas, Houston, Los Angeles and Washington, D.C., according to Perdieu.

“The Indirect Channel team is constantly recruiting new dealers to add to the team and help spread the value that L3Harris technology provides,”

Todd Perdieu
L3Harris North American
Indirect Sales director

local community ties are also beneficial in a regional partner, Perdieu said.

“Different dealers have different capabilities, so we have different opportunities for them,” he added.

REGIONAL SUPPORT

L3Harris leverages a two-tier distribution model for its North American PSCP indirect channel support. This allows dealers and resellers to send purchase orders to one of four Regional Center of Excellence (RCEs), which then collects purchase orders from around the area and sends bulk orders to L3Harris.

“This model is more efficient, and the RCE layer is important to our dealers because it lowers their cost,” Perdieu said.

“The RCEs have the lion’s share of the inventory, so the dealers don’t have to invest in that. They can help the dealers grow their business.”

The model also facilitates agility for L3Harris by focusing support to the regional centers and letting the RCEs provide local assistance to the dealers themselves. Further, dealers buy for resale, so their revenues are not limited to commission.

Not only is L3Harris the only manufacturer in the industry that offers such a regional support layer, it does not limit its dealers

or resellers to certain areas of its product catalog, according to Perdieu.

“Because we have built-in support, we have always allowed our dealers to sell our full catalog of our products and services,” he said. “We provide the training, the built-in support and allow them to sell everything.”

EXPANDING THE NETWORK

Change is never easy, but L3Harris and its channel structure makes joining the public safety and professional communications team seamless. The company’s commitment to supporting its channel with the resources has led to business turning points for companies including Advanced Communications & Electronics, Inc.

For Advanced, a disintegrating relationship with their previous product supplier required an expedited transition to a new partner, according to Lori Henz, Advanced’s vice president.

Advanced and L3Harris met to discuss the benefits of the L3Harris products and support and had an agreement in place within a week. Before a month had passed, L3Harris and Dailey & Wells Communications, a San Antonio-based RCE, sent down teams of engineers and project managers to train the entire Advanced team on the ins and outs of the new products and service support.

L3Harris provides online training courses, demonstration equipment, dealer account overviews, business and sales plans to support new partners’ acclimation into the new organization, according to Perdieu.

“Quite often, the Regional Center of Excellence is right there with them along the way, sharing equipment and supporting the dealer getting their feet off the ground,” he said. “Dailey & Wells was a classic story of an RCE supporting a dealer and how that can be a very rewarding relationship for the dealer.”

The partnership with L3Harris has been a boon for the company, according to Henz. Advanced has increased sales and their customer base. The level of L3Harris and Dailey & Wells’ support for Advanced and their customers “really cements the brand,” she adds.

“In our 20-year history with our previous supplier, we never had interaction with anyone, even over a new product,” Henz said. “It’s really incredible the relationship L3Harris builds with its dealers. The support has remained at that level or higher since that very day.”



**LEARN MORE
ABOUT ADVANCED'S
STORY**



OWN THE NIGHT

Target. Engage. Neutralize.

The L3Harris ENVG-B is today's most-advanced Situational Awareness Night Vision goggle. This dual-wave solution fuses white phosphor and thermal technologies, giving soldiers what they need—unmatched clarity in all battlefield and light conditions. They can bring weapon sight images into the goggle and see around corners without risk of exposure—speeding operations while increasing effectiveness and, most importantly, soldier safety.

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L3HARRIS™
FAST. FORWARD.