

QwikConnect[®]

GLENAIR • OCTOBER 2026 • VOLUME 30 • NUMBER 4



GAME-CHANGING
**Unmanned Military
Defense Systems**



2027 CALENDAR



**Transit Navigation
Satellite System (1960)**

The World's First Operational Navigation Satellites
Transit became the world's first operational satellite navigation system, providing accurate positioning for naval forces and proving that space-based navigation could fundamentally reshape military operations.

JANUARY 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					New Year's Day	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



AQM-34 Lightning Bug [1962]

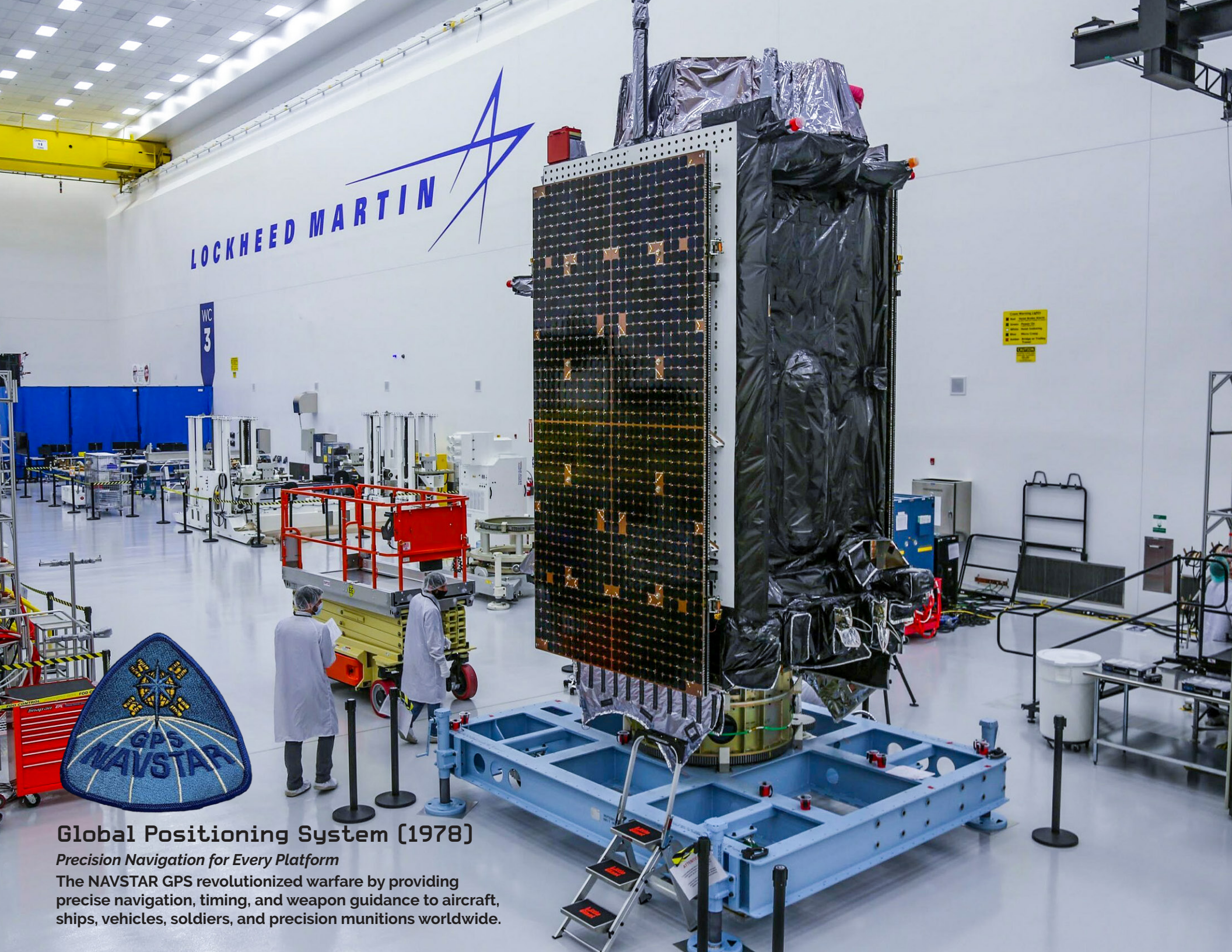
Pioneering Remotely Piloted Reconnaissance
The AQM-34 Lightning Bug flew thousands of reconnaissance missions during the Vietnam War, demonstrating the effectiveness of remotely piloted aircraft for intelligence and surveillance. The program's legacy continues today through modern U.S. Air Force UAV operations, including those of the 147th Attack Wing.

FEBRUARY 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
Valentine's Day	Presidents' Day					
21	22	23	24	25	26	27
28						



Defense Support Program [1970]
Global Missile Warning from Space
DSP satellites gave the United States continuous infrared surveillance capable of detecting ballistic missile launches worldwide, establishing continuous global missile warning for the first time.

MARCH 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
			St. Patrick's Day			First Day of Spring
21	22	23	24	25	26	27
28	29	30	31			
Easter						



Global Positioning System (1978)
Precision Navigation for Every Platform
The NAVSTAR GPS revolutionized warfare by providing precise navigation, timing, and weapon guidance to aircraft, ships, vehicles, soldiers, and precision munitions worldwide.

APRIL 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
				April Fool's Day		
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	



IAI Scout [1979]

The Drone That Changed Air Warfare

The IAI Scout demonstrated that unmanned aircraft could provide real-time battlefield intelligence, target acquisition, and battle damage assessment without risking aircrews. Its success during Operation Mole Cricket 19 validated networked drone operations and established the modern doctrine for military ISR.



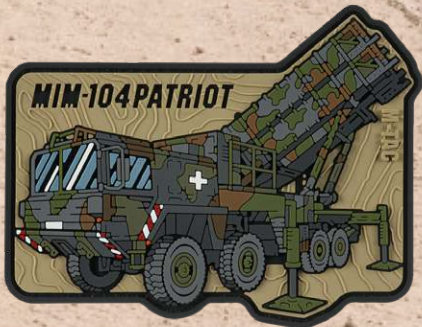
MAY 2027

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
Mother's Day						
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
	Memorial Day					



MIM-104 Patriot (1984)

Integrated Air and Missile Defense
Patriot established the modern standard for mobile air defense, evolving from aircraft interception to highly capable ballistic missile defense.



JUNE 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
Father's Day	First Day of Summer					
27	28	29	30			



GUIDED MISSILE SEEKER

Detects and tracks the target throughout the terminal phase of flight, using infrared, radar, laser, imaging, or other sensing technologies to guide the missile to impact.



ACTIVE ELECTRONICALLY SCANNED ARRAY (AESA) RADAR

AESA radar uses thousands of electronically controlled transmit/receive modules to steer radar beams almost instantaneously without moving antennas. The technology enables simultaneous search, tracking, targeting, mapping, and electronic warfare functions with exceptional speed and reliability.



SYNTHETIC APERTURE RADAR (SAR)

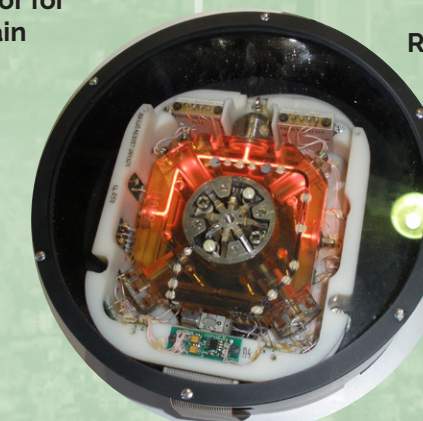
Synthetic aperture radar produces detailed images regardless of weather, smoke, or darkness by combining successive radar returns into high-resolution maps. SAR has become an essential sensor for reconnaissance, surveillance, terrain mapping, and target identification.

AI EDGE PROCESSOR

AI edge processors bring advanced computing directly onto the platform, enabling onboard sensor fusion, target recognition, autonomous navigation, and mission decision-making without constant reliance on remote operators or communications links.

RING LASER GYROSCOPE

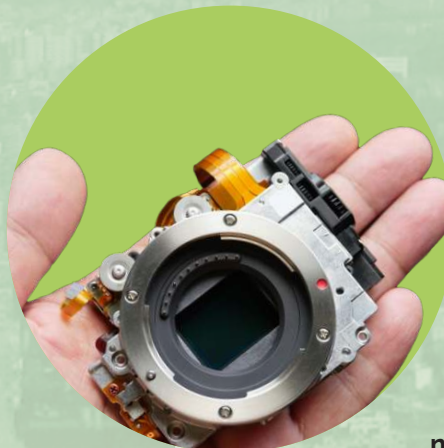
Ring laser gyroscopes revolutionized inertial navigation by measuring rotational motion without moving mechanical parts. Their exceptional accuracy and long-term stability made precision guidance possible for aircraft, missiles, ships, and spacecraft operating independently of external navigation signals.



Inside Today's Autonomous Defense Systems

CCD/CMOS IMAGING SENSOR

Solid-state imaging sensors replaced film-based reconnaissance with compact digital cameras capable of capturing high-resolution imagery in real time. CCD and CMOS technology forms the foundation of modern electro-optical surveillance, reconnaissance, and targeting systems.



FORWARD-LOOKING INFRARED (FLIR)

FLIR systems detect thermal energy rather than visible light, allowing operators to identify targets through darkness, smoke, haze, and other obscurants. Thermal imaging has become indispensable for surveillance, navigation, and precision targeting.



INERTIAL MEASUREMENT UNIT (IMU)

An inertial measurement unit combines precision gyroscopes and accelerometers to continuously measure a platform's motion and orientation. Modern IMUs—often based on compact MEMS sensors—provide the essential navigation data used for guidance, flight control, and autonomous operation.



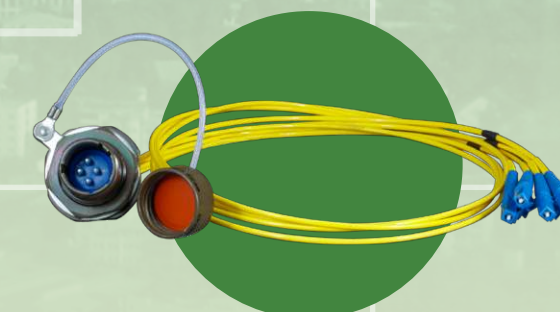
SOFTWARE-DEFINED RADIO (SDR)

Software-defined radios replace dedicated hardware with programmable digital signal processing, allowing a single radio to support multiple waveforms, frequencies, and missions. SDR technology provides the flexibility required for modern networked military communications.



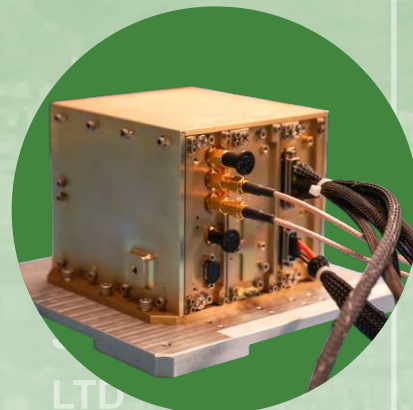
HIGH-SPEED OPTICAL DATA LINKS

Optical data links move enormous volumes of information between sensors, processors, storage devices, and communications systems while remaining immune to electromagnetic interference. Fiber-optic networks have become increasingly important as autonomous platforms generate ever-larger streams of mission data.



LTD GPS RECEIVER

GPS receivers provide precise positioning, navigation, and timing for military aircraft, missiles, ground vehicles, ships, and individual warfighters. Combined with inertial navigation systems, GPS enables highly accurate guidance across virtually every modern defense platform.





RQ-4 Global Hawk [1998]

Persistent Intelligence, Surveillance,
and Reconnaissance

Global Hawk proved unmanned aircraft
could provide continuous strategic
reconnaissance over enormous distances,
dramatically expanding battlefield awareness.



JULY 2027

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
	4	5	6	7	8	10
Independence Day					9	
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



MQ-9 Reaper [2001]
The Armed Drone Era
The MQ-9 combined persistent surveillance with precision strike capability, redefining modern intelligence and precision engagement operations.

AUGUST 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



THAAD (2008)
Hit-to-Kill Missile Defense
THAAD demonstrated reliable exo-atmospheric interception using kinetic energy alone, representing a major advance in ballistic missile defense technology.

SEPTEMBER 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
	5	6	7	8	9	10
	Labor Day					Patriot Day
12	13	14	15	16	17	18
19	20	21	22	23	24	25
				First Day of Autumn		
26	27	28	29	30		



X-37B Orbital Test Vehicle [2010]

Reusable Military Space Operations

The X-37B pioneered long-duration autonomous missions in orbit, demonstrating reusable spacecraft technologies and flexible on-orbit experimentation.



OCTOBER 2027											
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday					
					1	2					
					3	4	5	6	7	8	9
					10	11	12	13	14	15	16
					17	18	19	20	21	22	23
					24	25	26	27	28	29	30
31											
Halloween											



SpaceX Falcon 9 (2010)

Reusable Launch Changes Space Economics

Routine booster recovery dramatically lowered launch costs and accelerated deployment of military and intelligence space capabilities, particularly in support of Starlink, a game-changing proliferated LEO architecture for resilient communications.



NOVEMBER 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
				Veteran's Day		
14	15	16	17	18	19	20
21	22	23	24	25	26	27
				Thanksgiving Day		
28	29	30				



CubeSat Launch Initiative Hits Full Stride (2018)

Expanding Access to Space
NASA's CubeSat Launch Initiative (CSLI) helped make routine, low-cost access to space a reality. By providing launch opportunities for CubeSats as secondary payloads, the program accelerated innovation and helped establish the SmallSat ecosystem supporting scientific, commercial, and national security missions.

DECEMBER 2027						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25		First Day of Winter			Christmas Eve	Christmas
26	27	28	29	30	31	
					New Year's Eve	

Outlook

The Long, Straight Line

I was over at our Allen Street complex on San Fernando the other morning and stopped for a moment to admire the long line of multi-spindle Wickmans cranking out backshells. If you listen closely, past the hum of those venerable old machines, you can almost hear the echoes of 1956, the year Glenair started out building those very same parts in an aircraft hangar at the Grand Central Air Terminal. Seventy years later, we are still right here in Glendale: the same privately held, independent domestic manufacturer, laser-focused on what we do best—supplying the critical interconnect nervous system that keeps the world's most sophisticated military, aerospace, and industrial technology alive.

In this final quarter of 2026, our annual calendar issue looks back at some of the most game-changing milestones in unmanned systems, guided missiles, and satellite platforms. Looking through those archival photographs, it struck me just how much of our own history is interwoven with these seminal programs.

When the Titan II launch vehicle was conceived in the late 1950s, the defense industry needed something unprecedented: long-length, heavy-duty cable assemblies and unfailing umbilical links capable of handling massive structural loads and intense thermal environments. We rolled up our sleeves, figured out how to blow jacketing onto those impossibly long assemblies, and delivered. That same can-do attitude eventually led to the "Golden Umbilical" life-support cable that kept astronaut Ed White safely tethered to his spacecraft during America's first spacewalk in 1965.

From those early days of the space race to the modern era, our philosophy hasn't changed a lick. We don't build the computer brains, digital sensor arrays, or autonomous flight software. We leave that to the brilliant minds manning our customers' engineering bays. But whether it's a legacy aircraft or a collaborative combat vehicle preparing for a test flight next Tuesday, those systems cannot operate without a flawless interconnect architecture linking power, sensors, communications, and controls. That, my friends, is where we have always excelled—even as the industry has evolved from conventional wiring to gigahertz-speed digital networks, multiport RF systems, fiber optics, and SWaP-optimized packaging.

Today, when engineers survey the landscape of modern electronic warfare and autonomous systems, they find Glenair innovations everywhere: Series 80 Mighty Mouse and Series 89 Nanominiature connectors reducing mass in high-density drone gimbals, El Ochito® octaxial contacts pushing 10GbE data through guided weapons, Series 795 Micro-Crimp designs integrating 65 GHz RF lines into radar seekers, and SuperFlex PCB assemblies surviving the punishing vibration of autonomous flight.

Seventy years is a long time to do anything. But when you build a culture around unconditional product availability, real-time engineering support, and an absolute refusal to let a customer down, the decades seem to pass in the blink of an eye. There is a long, straight line connecting the Glenair of 70 years ago with who we are today. To all our customers, partners, and the entire Glenair family who helped us build this remarkable legacy: take a bow.

Chris Toomey

QwikConnect

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