

Worldwide Satellite Magazine

SatMagazine

December 2021

YEAR IN REVIEW issue

The SpaceX Falcon 9 launch of
NASA's DART mission from Space Launch
Complex 4 East (SLC-4E) at
Vandenberg Space Force Base.

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YEAR IN REVIEW: Gilat Satellite Networks

Gilat Satellite Networks is a leading global provider of satellite-based broadband communications. The company is committed to providing affordable broadband connectivity to improve the lives of millions of users in all parts of the world, on land in the air and at sea.

The COVID-19 pandemic has had severe consequences during 2021 that have affected so many aspects of people's lives and continues to do so. Gilat understands that the ability to easily and cost effectively communicate is still growing in importance in order to continue working, learning and connecting to loved ones far away. Toward the end of 2020, the world was feeling cautiously optimistic that the COVID-19 pandemic was slowing down. While the expected timing was a bit delayed, and its economic impact was felt well into 2021, Gilat continued to transition to meet global challenges and the company enjoyed some extremely significant accomplishments throughout 2021.

Market Leadership in Cellular Backhaul over Satellite: Gilat continues to lead the cellular backhaul industry over satellite. According to a new report by industry analyst [NSR](#), Gilat is the number one vendor in modern shipments with a market share of approximately 40%. Gilat also continues to lead the 4G/LTE market with 80% market share.

Gilat's satellite know-how and rural operational expertise positions Gilat as an excellent choice for turn-key projects as evidenced with significant 2021 awards:

The firm's managed service strategy continues to be successful, bringing in larger contracts with recurring revenue.

Gilat was awarded a large contract expansion with [Globe](#), the Philippines' largest mobile network operator. Globe selected Gilat's robust, end-to-end solution that provides high-quality service to quickly expand their nationwide coverage, answering the rapidly growing demand for connectivity. Gilat's cellular backhaul over satellite brings a quick solution compared to long and tedious efforts of laying out fiber, particularly in areas with challenging terrain.

In addition to managed service deals, Gilat was awarded several cellular backhaul equipment deals of national importance in Mexico, working closely with our longtime partners, [Hispasat](#), and the service provider, [AXESS](#). Gilat is supplying network equipment and VSATs to enable service to the MNOs in Mexico, supporting our partners to extend the service of [Altan La Red Compartida](#), the shared telecommunications network in Mexico that was built



In addition, we are seeing significant expansion and follow on orders from our Tier-1 MNOs in other parts of the world, including in North and South America, Europe, Asia, Africa and Australia. This is a testament to the great value that our customers see in our solution as they continue to expand their networks.

Another important win came from [TIM Brazil](#), our leading MNO customer in LATAM. Using Gilat's cellular backhaul solution, TIM Brazil expanded their large, IoT project. They expanded their agriculture IoT network to address the critical need of enabling better communication between the field and the office, ensuring cost-effective decisions, better crop management and greater speed, efficiency and productivity in the agriculture sector.



Mobility: Mobility continues to be a major focus area for Gilat. That said, the mobility market segment, especially IFC and Maritime, was most heavily hit by the COVID-19 pandemic. On a positive note, we are starting to see recovery and are optimistic as travel slowly resumes. Fueling this optimism are numerous contract awards as well as the successful testing of Gilat technology.



Gilat secured a substantial order from our partner [SES](#), the leader in global content connectivity solutions, for our next generation mobility platform. This is a breakthrough in solidifying our leadership in the mobility market, enabling the supply of initial maritime services to some of the world's top cruise-liners and maritime service providers. Connectivity will be delivered by our multi-orbit platform, using the [Q3b mPOWER](#) constellation and other SES GEO satellite assets, including [SES-17](#).



to supply connectivity to more than three million people. Mexico's underserved rural population will benefit from 4.5G/LTE coverage, finally able to enjoy high-quality mobile broadband voice and data services. In addition, Gilat, through AXESS, is providing the satellite network and equipment in Mexico to LATAM's largest **Mobile Network Operator (MNO)** to bring connectivity to rural Mexico.

Moving around the world, Gilat received a large award from a Tier-1 mobile network operator in Japan for cellular backhaul expansion to quickly provide coverage to rural areas, and to support emergency response in the case of natural disasters. Gilat was selected, in part, based on the company's ability to meet the aggressive deployment schedule required by the carrier. This contract award was in addition to numerous expansion and follow-on orders from other Tier-1 MNOs in Japan.

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In Asia, a leading Chinese system integrator selected Gilat's aero modem for the Ka-band *In-flight Entertainment and Connectivity* (IFEC) system to install on the entire fleet of the first airline in China and on additional domestic airlines. IFEC on-board the first aircraft is already operational, providing commercial service with remarkable performance, enabled by Gilat's aero modem, *Taurus*. Further, Gilat was selected to equip hundreds of boats, vessels and cruise ships with satellite communication. Gilat's modems and transceivers were successfully deployed on numerous maritime vessels.

Gilat successfully tested its *Electronically Steered Antenna* (ESA) over *Inmarsat's Global Xpress* (GX) network. Gilat's open-architecture proven ESA has been integrated with Inmarsat's *G-MODMAN* solution. This was the first time that a live demonstration of an ESA terminal was performed on an Inmarsat operational GX satellite.

Gilat also marked a key milestone as *Anuvu* (formerly *Global Eagle Entertainment*), a major IFC provider, successfully tested its IFC high-power transceiver, the *Wavestream AeroStream 40Ku*, achieving *DO-160G* certification.

The AeroStream 40Ku transceiver is designed for exceptionally high-reliability, with a field-reported *Mean Time Before Failure* (MTBF) of greater than 30,000 flight hours. The high-power transceiver incorporates the latest in *Gallium Nitride* (GaN) technology and enables more return bandwidth from the plane back to the satellite than previous generations. The successful completion of environmental conditions testing for airborne equipment, DO-160G, brings the transceiver a step closer to airworthiness and *Supplemental Type Certification* (STC).

Enterprise: In the Enterprise segment, Gilat received awards across several different verticals as well as geographic regions. Bridging the digital divide is a high priority as broadband penetration has a large economic impact on a country. As people become more reliant on the Internet for work and other aspects of everyday living, connectivity becomes even more important.

In Asia Pacific, Gilat entered a strategic agreement with a large government corporation. The equipment and multi-year managed-services contract will enable connectivity for multiple applications across the nation. Gilat is responsible for building and operating the network to provide nationwide coverage for a range of applications. These include, but are not limited to enterprise applications, with strong opportunities for cellular backhaul, emergency-response and mobility applications such as *Comms-On-The-Move* (COTM) and *Comms-On-The-Pause* (COTP). Gilat's multi-service, single platform, *SkyEdge II-c* and its wide set of fine-tuned VSATS will answer the government's requirement for robust connectivity to the country's most remote areas.



Moving to North America, Gilat signed a strategic agreement with *Pacific Dataport Inc. (PDI)* for delivery of ubiquitous broadband coverage in Alaska. Gilat's SkyEdge II-c, multi-service platform will support the goal of PDI's Aurora Network to deliver a wide range of applications to the population of Alaska. PDI intends to provide a true multiservice network that will serve the Alaska market with both fixed and mobility applications. The targeted fixed applications range from direct-to-home broadband service to consumers, to an assortment of enterprise applications such as backup and full-time IP data services for businesses, organizations, schools, libraries, and government. The planned mobility applications include cruise ships, fishing boats and commercial aviation.

In Latin America, SES awarded Gilat a contract for multiple broadband applications. Gilat's multi-service platform will support SES in cellular backhauling, enterprise and *Universal Service Obligation* (USO) projects, as SES extends services into LATAM with the deployment on new regional hubs.

The COVID-19 pandemic demonstrated just how important it is for schools and students to have access to the Internet. This is particularly difficult in developing countries and rural areas where most people still aren't connected. Gilat is working on several projects around the world to help bring broadband connectivity to every school in every village at an affordable price.

SES also selected Gilat to enable a Tier-1 4G/LTE MNO in Brazil to provide broadband connectivity for education. Gilat's SkyEdge II-c platform will provide connectivity to hundreds of schools in Brazil over the *SES-14 Ku-band High Throughput Satellite* (HTS). This will enable the Tier-1 MNO to fulfill the government obligation of extending broadband connectivity for education to Brazil's most remote schools.

Gilat was selected by *Telefonica Global Solutions* (TGS) to equip the strategic teleport in Arica, Chile. The Arica teleport is located under gateway beams of multiple satellites with coverage over several countries in the region.

A Tier-1 Telco in Latin America selected Gilat to provide broadband connectivity over satellite to support bridging the digital divide. The project includes thousands of VSATs to be deployed in remote schools to further children's education in Latin America.

In another award, *Telespazio*, a joint venture between Leonardo (67%) and Thales (33%), selected Gilat to supply enterprise connectivity in Brazil for a leading, multinational, energy company. Gilat will provide the satellite network and thousands of VSATs to energy plants of Brazil's largest private sector energy company.

NGSO & VHTS: As a leading provider for the NGSO and VHTS market, we are proud of our accomplishments this year in securing additional contract awards. We believe that our market leadership will continue into 2022 as additional NGSO and VHTS opportunities mature.

As was publicly announced, Gilat received a substantial award from a leading satellite operator to support the gateways for a *Low Earth Orbit* (LEO) broadband satellite constellation. Gilat was selected to supply the *Wavestream Gateway Solid State Power Amplifiers* (SSPAs) for the project.

The Wavestream Gateway-Class PowerStream 160Ka SSPAs, designed specifically for networks using wide bandwidth uplinks and high order modulation schemes, were selected because of their best-in-class technical performance and their unmatched reliability in harsh environments, best addressing the stringent requirements of *Non-Geostationary Satellite Orbit* (NGSO) constellations.

Forward Toward 2022: Gilat remains proud to lead the industry in delivering broadband connectivity over satellite to ensure that critical communication is available to all. It is Gilat's technical innovation, global expertise, local presence, outstanding support and superior delivery capabilities that enabled Gilat to prosper during these past two years that challenged the world.

During 2022 Gilat intends to further strengthen its leadership presence with next generation technology, in support of the market transition to multi-orbit constellations and very high throughput satellites.

Gilat is optimistic that 2022 will bring further global economic recovery and expects to continue leading in the CBH, Broadband, Mobility and Enterprise market segments.

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