



# WORLD'S FIRST HYBRID SUPERYACHT DEPLOYS DIMETRA™ EXPRESS

RELIABLE, INTEGRATED MISSION-CRITICAL COMMUNICATIONS AND CRYSTAL-CLEAR AUDIO DELIVER IMPROVED SAFETY AND ENHANCED GUEST EXPERIENCE



## M/Y SAVANNAH

M/Y Savannah was launched as the world's first hybrid superyacht and features an innovative, eco-friendly design. Her combination of a single diesel engine, a pioneering electro-mechanical propulsion platform, sleek, dynamic exterior and streamlined hull delivers 30% fuel efficiency and lower noise and vibration levels. Built in 2015 by the Dutch shipyard Feadship, this multi-award-winning superyacht is custom-built for world-class luxury yacht chartering. Being 83.5m (or 273' 11") in length, she offers flexible accommodation for up to 12 guests in 6 cabins and features interior styling by CG Design. She affords a wealth of spacious, open-plan interior living and open aft deck areas, as well as sensational amenities, such as an underwater lounge, a swimming pool, a jacuzzi, a spa, an elevator and a gym.

## CHALLENGE

M/Y Savannah was equipped with a legacy communications system. However, the crew were encountering interference and availability issues at busy anchorages or during large events, such as the Cannes Film Festival or the Monaco Grand Prix. Once the vessel was operational, it became

only too apparent how important clear, reliable communications are for both day-to-day operational efficiency and incident management. However, superyachts are not straightforward deployments, with huge amounts of metal, engines and instruments all packed into a tight space.

## CUSTOMER PROFILE

**Organisation:**  
M/Y Savannah

**Partner:**

- Brentwood Communications Ltd
- GV Marine

**Industry:**  
Maritime

## Motorola Solutions Products:

DIMETRA Express system comprising:

- MTS2 TETRA Base Station
- 20 x MXP600 TETRA Portable Radios
- 13 x ST7500 Compact TETRA Radios
- 1 x MTM5400 Mobile TETRA Radio
- Accessories including IMPRES™ batteries and chargers, belt clips, carry holsters and clear tube earpieces
- Radio Control Manager (RCM)
- VPN Gateway for Remote Service Access

**“We deployed this DIMETRA Express system with a Distributed Antenna System as we needed robust, clear communications in all areas of the vessel, at all times. TETRA has superb audio quality when compared to our previous DMR system and the interoperability options are extremely flexible. It means we can use the system for a range of functionalities beyond standard radio communications; for example, we’ve integrated it with our alarm systems. It’s also really low maintenance and has been superbly installed by our experienced partner Brentwood Communications; they provide ongoing management and support, too, whenever needed.”**

Tom Parker, Electro Technical Officer (ETO), M/Y Savannah



The ETO of M/Y Savannah contacted a few companies to look at upgrading the system to a clearly documented TETRA system that could also offer alarm management: among these was Motorola Solutions partner Brentwood Communications, who has been supplying superyachts since 2008. Brentwood Communications spent a few days on board, conducting a comprehensive survey in order to propose a fully considered specification; and it was this commitment and the ongoing service and support it offers that led Brentwood Communications to win the tender.

## SOLUTION

Following successful factory acceptance and on-board testing, Brentwood Communications deployed a Motorola Solutions DIMETRA Express TETRA system which included the MTS2 base station. Its small footprint and ease of maintenance, combined with remote management, meant this was an ideal solution for M/Y Savannah. Brentwood Communications also implemented a Distributed Antenna System (DAS) comprising a network of ten internal antennas, to ensure robust coverage throughout, even in the lowest, most inaccessible areas of the vessel. Crew members, meanwhile, were equipped with the advanced MXP600 and the compact ST7500 TETRA radios with suitable accessories.

Prior to the deployment, Brentwood Communications had also spent several days with long-term Motorola Solutions application developer GV Marine, in order to integrate its VesselWatch Alarm Management module into the system. This intelligent software, which has been designed especially for the luxury marine market, has been configured to push instant engine or fire alarms in the form of text messages to the radios of the engineers and crew of M/Y Savannah should alarms be triggered, to help them respond quickly and efficiently to any incidents, so keeping both the guests and the crew safe. Alarms include thrusters, compressors, cooling, pumps, stabilisers, lighting, doors and hatches, fire

dampers, ventilation and exhaust gas. As Tom Parker, ETO, M/Y Savannah, explains: “These sorts of solutions mean we can focus on our daily work, safe in the knowledge we will be immediately notified in case of any issues.”

Meanwhile the radios are monitored via the browser-based Radio Control Manager application, which can also be used for Dynamic Group Number Assignment (DGNA) and to temporarily or permanently disable radios, if needed. This remote management and updating is ideal for an ocean-bound vessel and is saving time, reducing costs and keeping M/Y Savannah’s infrastructure and devices working optimally and securely.

## BENEFIT

The DIMETRA Express system meets all M/Y Savannah’s current needs and is fully flexible, to meet any developing requirements in the future. Tom Parker summarises: “We are delighted with the coverage, sound quality and efficiency of our new DIMETRA Express system. Installation was quick and it’s easy to manage. And Brentwood’s consultative approach has really helped us; they go the extra mile, solve issues before they arise and aim to get the initial installation correct, which saves headaches and costs in the long term. We feel they are focused on developing and sustaining our relationship for the very long term – indeed, for M/Y Savannah’s lifetime.”

### Benefits:

- High-performance, mission-critical, instant communications for crews at sea or at port, with robust coverage in all areas of the vessel and surrounding waters (including support vessels and on-shore operations, if needed)
- Superior, crystal-clear audio with minimal interference, even in very crowded venues and marinas; the Motorola Solutions radios also offer automatic acoustic feedback suppression
- Secure communications with authentication and Air Interface Encryption (AIE) to protect against unauthorised users and encrypt communications and signalling
- User ID shown to ensure chain of command can be followed
- Flexible, future-proof system that has been integrated with the vessel’s alarm systems for maximum interoperability
- DIMETRA Express offers low installation and maintenance costs, fast deployment and easy ongoing remote management
- Ultimately the system is delivering improved safety, operational efficiency and, consequently, an enhanced on-board experience

