

# Marine Wing Communications Squadron 38

In early 2022, MWCS-38 teamed with the U.S. Air Force Chief Architect Office and industry partners to create the Joint Tactical Integrated Fire Control Network (JTIFCN), delivering fire-control quality tracks to distributed shooters and target engagement authorities. *Red Lightning* fused target data via MACG-38's flagship Multifunction Air Operations Center (MAOC) to successfully pass weapons-quality sensor data from a USMC AN/TPS-80 radar at Camp Pendleton to a U.S. Army PATRIOT battery in Fort Bliss, enabling successful air defense engagements. Through follow-on development of JTIFCN, MWCS-38 built the DoD's first live, tactical-level network of sensors, C2 entities and shooters capable of executing kill webs in support of a Combatant Command (CCMD) Operational Plan (OPLAN); this wasn't in a lab or on glossy Pentagon slides, these were real, ready and resilient networks capable of immediate deployment against peer adversaries. MWCS-38 highlighted the most compelling attributes of the Marine Corps' contributions to the Joint All Domain Command and Control initiative: combined arms, maneuver warfare, naval integration, and multi-domain warfighting. Next, MWCS-38 deployed across the USINDOPACOM region in support of operation Valiant Shield-22 (VS-22), establishing lethal, multi-domain networks enabling IMEF MAOCs to seamlessly share data with Joint, multi-domain sensors/shooters stretching from California to the Philippines (east-to-west) and from Japan to Australia (north-to-south). VS-22 was a critical rehearsal of OPLAN-level, multi-domain C2, and MWCS-38 built and sustained robust, resilient, and lethal networks capable of sensing, targeting, and executing Joint, multi-domain engagements across the Pacific. Following VS-22, MWCS-38 teamed with DoD and industry partners to develop and employ all-domain kill webs in support of Project Convergence 22 (PC-22). Leveraging the MAOC as the critical C2 node, MWCS-38 created target-quality networks fusing track data from the AN/TPS-80 radar, passive sensors, Air Defense units, MV-22 Digital Interoperability kits, and previously-unattainable F-35 Multifunction Airborne Data Link (MADL) information. *Red Lightning* also embarked a team aboard USS Lake Champlain (CG-57) to increase the lethality, survivability, and combined arms capability of 3rd Fleet partners. The MWCS-38 team supported multi-domain kill web integration of CG-57 with the MAOC and shore-based systems simulating expeditionary advanced bases (EABs), passing weapons-quality fires data beyond line-of-sight and enabling the entire PC-22 team to rehearse naval combat integration with EABs. Multiple visiting Senior Leaders remarked that MWCS-38 transformed PC-22 from a scripted JADC2 test event into an OPLAN-level mission rehearsal exercise.



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As directed by DC PP&O, MWCS-38 executed the first Service-level deployment of the Marine Corps Enterprise Network (MCEN) to Weapons and Tactics Instructor Course 2-22. Partnering with Marine Corps Forces Cyber Command, MWCS-38 designed a deployable tactical network that could displace on order, reach-back to the MCEN through denied or bandwidth limited transport, and execute multi-domain killwebs within hours, not days, of arrival in the objective area. Integrating administrative MCEN services with Marine Corps warfighting Programs of Record, *Red Lightning's* MCEN deployment demonstrated how the Marine Corps can successfully transform our MCEN into a global, always-on, sensor-integrated warfighting platform. Informed by MWCS-38's successful

MCEN deployment, the Deputy Commandant for Information established a transformation initiative to evolve the MCEN into a warfighting capability reflective of *Red Lightning's* WT1 2-22 deployment. On their own initiative, MWCS-38 Marines identified that the current techniques for employing the Very Small Aperture Terminal-Large (VSAT-L) was damaging 61% of all VSAT-Ls. MWCS-38 Marines identified both the problem and recommended solutions to Marine Corps Systems Command (MCSC). MCSC published service-wide guidance to correct the issue, saving millions of dollars and increasing VSAT-L operational readiness Service-wide.

During this period, MWCS-38 maintained a forward-deployed presence with no less than 20% its formation supporting Global Force Management tasking, including Marine Rotational Force-Darwin, 11th and 13th Marine Expeditionary Units, Aviation Combat Element Crisis Response Africa 1.0 and 2.0 deployments, and an Immediate Response Force deployment with 3d MAW aircraft to USEUCOM.

During this period, MWCS-38 scored 92% on its 32 inspectable areas (most for a 3d MAW Squadron) during the Logistics Readiness Evaluation, their highest score in the last three years. Additionally, MWCS-38 created and deployed maintenance contact teams to support 3d MAW's Marine Wing Support Squadrons (MWSS), filling critical maintenance gaps and enabling two of the three MWSS to earn otherwise-unachievable "mission capable" ratings during their Field Supply and Maintenance Analysis Office (FSMAO) inspections.

In 2022, MWCS-38 Marines earned two meritorious corporal and two meritorious sergeant promotions, two Non-Commissioned Officers of the quarter, two Marines of the Quarter, and the MACG-38 Marine of the year. MWCS-38 met retention goals, including 10 reenlistments from the Commandant's Retention Program. Physically fit, MWCS-38 personnel took 1st place for the men's and 2<sup>nd</sup> place for the women's category in the Installation Warrior Athlete Challenge and 3<sup>rd</sup> place for the Miramar Stronger Warrior Competition team event.

