

TACRON-21 had a phenomenal year in 2011, in which major strides were made to help solidify its importance in the Expeditionary Warfare Arena. The squadron continues to train its personnel to be the premier air space experts and controllers in the US Navy.

Detachment ONE started the calendar year four months into its scheduled deployment on board USS KEARSARGE (LHD-3). In January, the detachment was in the Arabian Gulf supporting the offload of 26 MEU Marines to deploy downrange into Afghanistan. After a successful offload and Gulf of Aden transit the detachment found itself planning several Be Prepared To (BPT) orders to assist in possible American Citizens (AMCITs) evacuations from several "Hot Spots", including Egypt and Lebanon. This planning provided several opportunities to have our air space expertise put to the test, and we were able to provide LNO's from our detachment to support Higher Headquarters planning in both 6th and 5th Fleet. The detachment also conducted the more routine TACC operations with ULT flights being conducted in the Horn of Africa, specifically the Djibouti training ranges.

The beginning of March saw a huge opportunity for our detachment to prove itself as running a premier Tactical Air Control Center. In our seventh month of an extended deployment it appeared as though we were headed for another "Be Prepared To" mission that did not come to fruition. It very quickly appeared that this mission was going to be different. The biggest signal was actually a combination of two signals. RDML Klein, normally assigned to NAVCENT as Commander Expeditionary Strike Group FIVIE, was going to remain as Commander, KSGESG as the ESG was being sent through the Suez Canal to be prepared to support operations in Libya.

Throughout workups and deployment Kearsarge ARG was under the command of Commander Amphibious Squadron FOUR. On January 30th, RDML Klein, Commander of Expeditionary Strike Group FIVE, was assigned as Commander, Kearsarge Expeditionary Strike Group. This was initially to support operations in Egypt. KSGESG's first order to enter the Mediterranean was in support of Egypt. USS Kearsarge got as close as transiting the Gulf of Suez before being turned around. Marines from the 26th MEU supported operations in Egypt, but the KSGESG was not required to support a Non-Combatant Evacuation (NEO) as planned.

One of the most important early moves made by TACRON 21.1, was to transfer their CENTRCOM CAOC Naval and Amphibious Liaison Element (NALE) liaison officer to AFRICOM. This was done within a day of USS Kearsarge being ordered into the Mediterranean. Having a member of TACRON 21.1 in at the ground floor of planning paid tremendous dividends. The KSGESG Tactical Air Control Center (TACRON's operational watch floor) concept and capabilities were fully incorporated within C/JFACC planning guidance (e.g. Airspace Control Plan, Area Air Defense Plan, Special Instructions) from the start. Another very important move was to send an additional liaison officer from TACRON 21.1 to NAVEUR/NAVAF/SIXTH Fleet.

The mission became named Operation Odyssey Dawn (OOD). The evidence suggested that this operation could not proceed within the timeline planned by AFRICOM and NAVAF for a few reasons. For the Command and Control (C2) of aviation assets, higher headquarters had not allotted an aircraft carrier to the Mediterranean Sea. In addition, assigned US AWACS were three to four days away from arriving on station. However, once the United Nations met on MAR 17, 2011 and passed UNSCR 1973, circumstances dictated that TACRON 21.1 would need to fill a role that had never been done before by its community. TACRON 21.1 was going to fill the role as the primary and only persistent C2 node within the Joint Operating Area (JOA) for OOD.

The naval Tactical Air Control Center (TACC) is the primary air control agency for an Amphibious Task Force (ATF). In other words, all air operations for the amphibious force are normally controlled from TACC. TACC is comprised of a detachment of personnel from one of the four TACRONs. Two TACRONs are based onboard JEB Little Creek-Fort Story, VA (TACRON 21 and 22) and two based onboard NAB Coronado, CA (TACRON 11 and 12). Normally, the mission of TACC is to plan, direct and control tactical air operations within an amphibious area of operations (AO) and to coordinate ATF/ESG air operations in a joint and combined environment. By mid-March, 2011, leadership clearly stated that there would be no forces on the ground in Libya. As a result, TACRON 21.1 became available to support more than just the ESG air operations and could provide tactical C2 in support of the entire joint/combined OOD air campaign.

Preparing for this greatly expanded role was a monumental challenge. Doctrinally, the TACC detachment is scaled to meet the needs of the Commander Amphibious Task Force, and TACRON 21.1 was scaled to meet the needs of a three-ship ARG, two MH-60S, and the "standard" Air Combat Element (ACE) of the Marine Expeditionary Unit (MEU) consisting of 26 USMC aircraft. To fill the needs of the KEARSARGE ARG and 26 MEU, TACRON 21.1 brought a total detachment of 33 Sailors, including six qualified Tactical Air Control Center Watch Officers (TACCWO), and, by the time OOD began, seven qualified Tactical Air Control Center Supervisors (TACCSUP) and one other qualified Tactical Air Traffic Controller (TATC). The detachment's officers, in particular, had extensive aviation knowledge in both combat and the Sixth Fleet area of operations. The six officers had a combined total of just under 1200 combat hours in strike fighter, airborne early warning, maritime rotary, and maritime fixed wing platforms. In addition, some of the officers had extensive deployment and staff experience in the Mediterranean which assisted the detachment to rapidly adjust to its expanded C2 role. While becoming the single aviation C2 node for a Joint Operations Area (JOA) encompassing over one hundred thousand square miles, was a daunting task, the detachment began to feel more comfortable as the detachment planners broke down the mission and separated assignments based on individual experience. As the detachment began working closer with the Combined Forces Air Component Commander's (CFACC) Combined Air Operations Center (CAOC), a comparison was made between the role TACRON 21.1 was assuming and that of an Air Force Control and Reporting Center (CRC).

An Air Force CRC is a mobile command, control, and communications radar element of the US Air Force theater air control system. The CRC integrates a comprehensive air picture via multiple data links from air, sea, and land-based sensors, as well as from its surveillance and control radars. It performs decentralized command and control of joint operations by conducting threat warning, battle management, theater missile defense, weapons control, combat identification, and strategic communications. The CRC directly supports the JFACC requirement for situational awareness and execution of the Air Tasking Order/Airspace Control Order (ATO/ACO) by performing the theater battle management functions of surveillance, early warning, force allocation, airspace management, all source sensor data fusion, and intra-service connectivity. A full unit CRC is normally made up of over 350 personnel.

While a TACRON detachment does not have all the equipment of a CRC, TACRON 21.1 was able to meet all of the mission requirements. Systems used on USS Kearsarge were: 2-D and 3-D Air Search Radars, a single Amphibious Air Traffic Control Direct Altitude and Identification Readout (AATC DAIR) scope, two Advanced Combat Direction System (ACDS) scopes, Theater Battle Management Core System (TBMCS), SIPRNET (to include Voice over Internet Protocol (VoSIP) and mIRC chat), NIPRNET, plain old telephone system (POTS), UHF (LOS and Wideband SATCOM) and LINK 16 (including JVOICE) provided the detachment the ability to perform duties similar to a CRC.

With the hardware capabilities in place, the detachment then focused efforts upon effective personnel utilization. The enlisted portion of the watch teams were not sized any differently than routine TACC operations, but they now gave full coverage 24/7 vice 16 hours as was normal to support a 10-hour LHD flight window. Five Enlisted Sailors made up their portion of the watch team and consisted of one TACC Supervisor (TACCSUP), one Tactical Air Traffic Controller (TATC), one Status Board Operator, one Air Defense Identification Zone (ADIZ) Coordinator, and one Air Intercept Controller (AIC). The TACCSUP is in charge of supervising the Enlisted operators including the status board operator, whose workload increased more than 10-fold from routine ESG ops. The TACCSUP is the direct conduit between the TACCWO and the rest of the team.

Our one AATC DAIR scope was manned by the TATC position. Having only having a single scope, TATC was the most demanding of the enlisted positions due to vastly increased air activity and his/her new found role as "Tanker King." Over the twelve days of OOD, the TATC managed and coordinated transfer of 15.9 million pounds of fuel from 318 tankers to 750 tactical aircraft which accounted for 66% of all fuel transferred.

To enforce the no-fly zone, the detachment maintained a qualified and current AIC in TACC to take control of any potential air-air engagement. The AIC often wore a secondary hat as well, controlling the maritime platforms (usually a P-3) for the Surface Component Commander. Only one Air Intercept Controller and one Air Intercept

Controller Supervisor was assigned (as normal) to the detachment. Fortunately, USS KEARSARGE supplied an additional two qualified AIC's from the ship to allow the detachment to fully man three watch teams (8 hour shifts). A second Operations Specialist (OS) had the task of ADIZ coordinator, and was responsible ensuring that all flight ops from USS Kearsarge and throughout the JOA were coordinated with the unit performing ADIZ duties. During certain portions of OOD, no other unit was available to perform ADIZ and that additional responsibility fell upon the ADIZ Coordinator in TACC. In addition, the ADIZ coordinator acted as an additional set of eyes, often assisting in picking out individual contacts at the request of the TACCSUP or TATC.

The detachment officer-in-charge (OIC) and the plans officer normally did not stand TACC watch due to the nature of their duties. However, the high tempo and volume of operations during the opening days of OOD required two watch standers on 24 hours a day (this is double normal watch team manning). The OIC and plans officers were brought into the watch rotation to supplement the watch standing requirements for the normal watchstanders. During the OOD, TACCWOs had a much greater responsibility than traditional roles including passing dynamic target "10-lines" to strike aircraft, maintain situational awareness of all air and surface contacts within the JOA, pass in-flight reports to the CAOC, manage the overall tanking plan, and coordinate with internal and external agencies via radio, phone, chat, and email. The detachment's regular TACCWOs stood two separate 10 hour watches, and the OIC/plans officers stood a 4-hour watch above and beyond their still required daily tasks. Constant adaptability and on-the-job-training was the only way for the entire watch team to continue to grow into our new role as the persistent C2 node.

For the first week of OOD, TACRON 21.1 was the only controlling agency for the following missions: force marshalling, electronic warfare (EW) control, reconnaissance (RECCE) control, and airborne aerial refueling (AAR), dynamic targeting (DT), time sensitive targeting (TST), air interdiction (AI), suppression of enemy defenses (SEAD), defensive counter air (DCA), and combat search and rescue airborne mission commander (CSAR AMC). The "AMC" role was unique to the situation. Since an AWACS was not present, and TACC had suitable communications reach and radar coverage of the area, TACC assumed a kind of surface-based AMC role. This role came into fruition during the recovery of the F-15 crew that crashed near Benghazi on March 21, 2011.

Force Marshalling, EW control and RECCE Control consisted of TACRON 21.1 taking the entire OOD Air Tasking Order (ATO) and making sure all sorties tasked were accounted for throughout the JOA. The ATO for OOD was constantly changing, with the number of participating countries and the number of aircraft participating growing day by day. The TACCWO ensured the latest version of the ATO was available to all units within the ESG and ensured that the information was available to the STATBOARD operator who would track it on the board. The key to maintaining situational awareness (SA) on the constantly changing data was the status board: a spreadsheet displaying pertinent information (lead aircraft callsign, type, refuel capability, number of aircraft in flight, airspace and altitude assignment, fuel remaining,

souls onboard, remaining weapons loadout and scheduled tanker on a 46-inch LCD mounted above the TATC's scope. By having an accurate ATO and amplifying information on the STATBOARD, as well as adequate radio coverage to talk to the aircraft, each watch team established and maintained SA of all theater assets within their assigned Battle Management Area of the JOA.

Tanker/AAR management presented the most intensive process for the watch teams, as it included airspace and altitude assignment/re-assignment, frequency management, fragged fuel from both the tanker aircraft and from the receiving aircraft, extra fuel available from the tankers themselves, fallout planning, and prioritization. The fluidity of the operations within the first several days required a constant change to the daily tanker plans published by the CAOC. It was the primary responsibility of the TACC team to ensure that all tanker requirements were met as mission areas, time on station and targets constantly changed. The TATC controlled all tanker movements on ICEPACK and then assigned tankers the appropriate coordination frequency, based on track position and altitude. The learning curve for watch teams was steep, however the entire detachment became very proficient within a couple of shifts.

Time Sensitive Target (TST) and Dynamic Tasking (DT) missions were JFACC assigned missions that passed through TACRON 21.1 directly to an aircraft giving that aircraft the authorization to prosecute the given target. The TACCWO received updated tasking from appropriate agencies and passed the tasking in the correct format to ensure efficient and accurate mission success. Through the first week of OOD, TACRON 21.1 was responsible for over two hundred of such DT/TST missions and was the only avenue available to pass such tasking. Without the persistent C2 node that TACC provided within the JOA, it would have been difficult, if not impossible, for the JFACC to prosecute the majority of targets potentially allowing Benghazi to fall to the Libyan regime's forces.

On the third night of Operation Odyssey Dawn, TACC had to execute a mission no one wanted to perform: CSAR. TACC received a radio transmission that an F-15E was down while prosecuting a target in-country. There was no more time to consider the semantics of AMC or MC; it was time to execute the mission. Within minutes, TACRON 21.1 identified an airborne on-scene commander, notified the JFACC, and initiated the required actions to get the Tactical Recovery of Aircraft and Personnel (TRAP) team from the 26th Marine Expeditionary Unit (MEU), also onboard USS KEARSARGE, to upgrade their alert posture in anticipation of launching. The next hours were a flurry of communications, chats, phone calls, relays, and dynamic tanker management that cannot be discussed in this article due to its classification. However, a collective joint effort from all players involved along with effective command and control for approximately 18 aircraft led to the timely and safe recovery of the aircrew.

As TACRON 21.1 approached days five and six of OOD, AWACS began flying in theatre and began taking on the role of primary C2 for up to 16 hours a day. TACRON 21.1 was not finished though, as the watch remained manned and ready 24/7. Whether it was for maintenance, weather, or tanker fallout, when the airborne C2 was not

available to cover the JOA, TACRON 21.1 continued to fill the role of persistent tactical C2 for the duration of OOD.

TACRON 21.1's performance during Operation Odyssey Dawn demonstrated that TACC's mission can be expanded when a demand exists for a unit to go above and beyond its normal capabilities to accomplish a mission in a joint/combined environment. Through the combination of hard work, experience, teamwork, and dedication, the TACRON 21.1 detachment was able to perform a mission it was not designed for and it had never before executed.