



Elite Navy/Marine unit uses 2 Gulfstream IIIs and 3 G550s to carry top leaders around the world.

By Phil Rose Managing Editor



Established on May 1, 1997, Fleet Logistics Support Squadron 1 (VR1) operates as part of the Fleet Logistics Support Wing and the Naval Air Force

Reserve. The VR1 "Star Lifters" primary mission is to provide safe, secure, connected, reliable and effective on-demand worldwide air transportation for Department of the Navy senior civilian and military leadership.

Squadron missions are considered an essential element of US national security strategy and execute under stringent schedule and protocol requirements—as well as intense media scrutiny. Operations and communications security are paramount, as are physical security

and adherence to the highest stan in

transport safety specialists—is supplemented by civilian contractors.

and adherence to the highest standards of professionalism.

VR1 is an elite unit. It serves 7 primary customers—the Secretary of the Navy, Chief of Naval Operations (CNO), Commandant of the Marine Corps (CMC), Vice Chief of Naval Operations, Assistant Commandant of the Marine Corps, Commander US Fleet Forces Command and Dir Naval Nuclear Propulsion. The squadron is certified to transport personnel up to, and including, the Vice President of the United States. It supports Department of Defense tasking and has provided air transportation to Congressional delegations, the Chairman of the Joint Chiefs of Staff and various combatant commanders. VR1 carries foreign counterparts of the CNO and CMC as directed, and has recently flown distinguished personnel

including former President and Mrs George H W Bush.

Squadron composition

VR1 personnel with C37B at ADW (Andrews AFB). Unit strength of 73—pilots, crew chiefs and

Based at Naval Air Facility (NAF) Washington—which is located at ADW (Andrews AFB, Camp Springs MD)—VR1 flies 2 Gulfstream C20Ds (GIIIs) and 3 Gulfstream C37Bs (G550s). The C20Ds date back to 1987, while the C37Bs were acquired in 2005 and 2006.

VR1 is a reserve squadron staffed with a mix of active and reserve component sailors, contractors and marines. The sailors are led by Commanding Officer (CO) Cdr Larry Artman (USN), while the marines of the Commandant's Flight Detachment are led by Officer in Charge Lt Col Marc Sehrt (USMC). A hybrid unit in every respect, VR1



Former CO Cdr Rob Lee (L) handed over squadron command to Cdr Larry Artman in Sep 2008. Models represent a VR1 C37B (L) and C20D.



Senior Marine Lt Col Marc Sehrt oversees VR1's Marine Corps component—the Commandant's Flight Detachment.

follows standard US Navy/US Marine Corps operating procedures.

Squadron complement is 29 pilots (14 USN full-time support reserve, 10 USN selected reserve, 4 USMC active and 1 USMC reserve), 10 crew chiefs (CC) (9 USN, 1 USMC) and 9 transport safety specialists (TSS) (7 USN, 2 USMC). A further 25 USN/USMC maintenance and support personnel are augmented by civilian contractors to meet VR1's maintenance and administrative requirements.

Mission aircrews are made up of 2 pilots, 1 CC—who also performs the duties of communication systems operator (CSO)—and 1 TSS.

Upholding excellence

VR1 holds numerous awards for success and performance. In 2007 alone the unit received the Chief of Naval Operations Aviation Safety Award, the Congressman Bill Young Operational Excellence Award, the Golden Anchor Retention Award, the James M Holcombe Award for Maintenance Excellence and the Noel Davis Award for Battle Efficiency.

Cdr Larry Artman (USN) took over as commanding officer (CO) of VR1 on Sep 5, 2008 after serving as executive officer (XO) for 15 months. This is normal routine—COs change every 15 months, each new CO having served as XO under his/her predecessor.

Commissioned in 1990 and designated a naval aviator in 1992, Artman has more than 4400 hrs TT, both rotary and fixed-wing, including almost 500 hrs in the C37B.

Before he joined VR1 in Jun 2007, Artman was the aviation requirements and capabilities officer for the Office of the Chief of Navy Reserve in Washington DC. Like other VR1 aircrew, he flies 250–300 hrs a year. He also has total responsibility for all aspects of VR1 performance, including chief pilot, director of operations and director of maintenance issues.

While VR1 accomplished more than 2700 mishap-free flight hours in 2008, Artman notes that meeting customer requirements—not amassing flight hours—constitutes what he calls "the metric of success." Missions may range from little more than 90 min of flight time in a 16-hr day to a "back side of the clock" trip starting at ADW and landing in a combat zone.

VR1 personnel are hand-picked. "Their backgrounds range from antisubmarine helicopters to the Blue Angels," says Artman, "but they have one critical trait in common—a record of outstanding performance across all parameters in the air and on the ground." VR1 pilots have an average military flight time in excess of 2500 hrs. Crews are expected to achieve mission success autonomously (with a concur-

rent reduction in total cost for a lean organization), and all military personnel and contractors are held to the highest professional and personal standards. Any who fail to maintain such standards face immediate transfer.

Around 20% of all squadron missions (representing 40% total flight time) are outside the continental US (OCONUS). Such overseas trips always require obtaining diplomatic clearances. Last year alone, VR1 conducted operations in 49 different countries, including Afghanistan, Argentina, Chile, China, Djibouti, Ethiopia, Georgia, Iraq and Kuwait.

"Last-minute OCONUS trips are a part of our business," says Artman. "They require VR1 to maintain a continuous high state of readiness." In many cases the squadron receives 2–4 weeks' notice for aircraft use. Details are finalized around 48 hours out, and the aim is for the aircraft to arrive on time every time. In other cases, VR1 can go from mission request to launch in as little as 4 hours, as for exam-



VR1 C37B takes off from ADW. Squadron aircraft carry no national insignia, and the last 3 digits of each aircraft's serial number provide the only identification.

ple when VR1 transported Navy divers and their gear to assist in recovery efforts following the Aug 2007 Minneapolis bridge collapse.

Last summer, VR1 transitioned from an inhouse trip planning system to Jeppesen Dispatch Service. Sehrt describes the move as an easy one, and says that it has not only reduced workloads for the operations department and for the pilots, but accelerated the decision-making process. "Jeppesen is familiar with the military and what our needs are," he says. The company has provided first-class support, adds Sehrt, who describes the transition to Jeppesen Direct as "wonderful."

Cdr Broc Chambers (USN) is the current executive officer. Like Artman, he was commissioned in 1990 and became a naval aviator in 1992. Chambers has 4600 hrs TT, all fixed-wing (spread fairly evenly between the Beechcraft T34C, Boeing C40, Douglas DC9 and Lockheed P3).

As XO, Chambers personally screens each pilot (checking fitness reports and flying competence, interviewing current and former COs) before issuing a green light for transfer orders to VR1. An experienced multiplatform instructor pilot, Chambers was the Fleet evaluator and model manager for the C40. He served in the Pentagon as transport aircraft requirements officer for the Director Air Warfare before joining VR1 in Jul 2008.

Former CO Cdr Rob Lee (USN) has 5300 hrs TT, all fixed-wing (2550 hrs in the Lockheed C130, 1250 hrs in the P3, and the remaining 1500 hrs in the C20/C37).

Lee left VR1 in Sep 2008 at the end of his command assignment and joined the Pentagon, where he serves as asst dir mobilization, Reserve Affairs—a post he expects to occupy for 2–3 years. "The thing I miss the most is working with the people," he says. "It's the camaraderie, the esprit de corps."

Cosharing VR1's mission, aircraft and support structure is the Commandant's Flight Detachment, a Marine Corps organization. Lt Col Marc Sehrt (USMC), who joined VR1 in late 2007 on a 3-year assignment, serves as the senior marine. His 21 years of service include 4 years (1997–2001) with



Operations Officer Lt Cdr Eddie Pilcher is on his 2nd VR tour, having previously flown Boeing C40s with VR59.

the Presidential Helicopter Squadron 1 (HMX1) at NYG (Quantico MCAF, Quantico VA) and 2 years as the C20G CO at HNG (Kaneohe Bay MCAF, Oahu HI). Sehrt's 4700 hrs TT include 1000 hrs in the C20G and over 500 hrs in the C37B. He is also qualified as an overwater instructor pilot.

The sharing of duties between marines and sailors makes for what Sehrt calls "a small amount of friendly rivalry." But he notes, "Integration has done wonders. The rivalry continually sets the bar higher and makes us better pilots." Beyond that, as Artman remarks, "Separate chains of command working together for a common purpose makes it an 'A' game for all involved."

Sehrt's responsibilities include ensuring that training activities maintain required combat skills concurrent with raising operational



Lt Jim Baldwin is VR1's maintenance material control officer. As contracting officer representative, he is also responsible for contractor logistics.

efficiency. He also oversees the professional and personal development of all marines assigned to the detachment. "This is a great job," says Sehrt. "One reason to join the Marine Corps is to take that leadership and transfer it to the next generation."

Training and safety

All crew initial training takes place at FlightSafety Intl (FSI) ILG (Wilmington DE) and SAV (Savannah GA). C37 pilots complete a short syllabus to attain proficiency, and are normally considered ready for a check ride after 2 or 3 flights.

C20 flightcrews attend CAE Simu-Flite DFW (Intl, Dallas–Fort Worth TX). Initial training on the C20 is slightly more extensive than that on the C37, and pilots usually complete a check ride after 5 flights.

Maj Ron Wood (USMC) is the unit safety officer. Commissioned in Dec 1991, Wood has 2600 hrs TT (1100 hrs rotary-wing as well as 600 hrs in the Beechcraft UC12, 600 hrs in the Cessna UC35 and 100 hrs in the T34). Currently a C37 pilot, Wood reports to Artman (as CO) for all safety issues and to Sehrt (as senior marine) for USMC issues.

He explains that the Navy is strict about how pilots accumulate hours. While a qualified pilot can be an aircraft commander—ie, can sign for the aircraft—with 100 hrs experience in type, 250 hrs is more typical. Each VR1 pilot averages around 250 hrs per year once they are qualified. Wood notes that most USMC flightcrew members come to the squadron with no prior Gulf-stream experience.

A major objective for Wood is to establish a safety plan and procedures that integrate military safety systems with internationally recognized safety management system standards. The aim is to create the highest safety bar possible, with a depth level that requires intense development and training. Wood was selected to lead this effort in recognition of his experience and dedication.

Lt Cdr Eddie Pilcher (USN) is VR1's operations officer. In his 13 years of service with the Navy he has amassed 4000 hrs TT (2600 hrs in the P3, 1100 hrs in the C40 and the remainder in the C37).



Safety Officer Maj Ron Wood (L) is developing procedures that integrate military safety systems and internationally recognized safety management standards. Gulfstream Site Mgr USN C37 CLS Program Sean Strudgeon (R) leads a team of 14 civilian technicians with military experience.

Pilcher is on his second VR tour, having previously flown C40s with VR59 at NFW (Fort Worth JRB, Fort Worth TX). This is not uncommon, he notes—while nearly all marines are on their first VR tour with the squadron, around half of VR1's sailors are on their second or third VR tour.

Aircraft for the job

The C37B is the aircraft of choice for overseas missions. Its 6500-nm-plus range allows it to fly nonstop from NAF Atsugi, Japan (near Tokyo) to ADW. Last year a VR1 C37B flew a nonstop mission from Iwakuni, Japan to ADW—a distance of 6443 nm—in 13 hours. Sehrt explains that the C20D is also used occasionally for overseas trips but is better suited for missions within the US. These include occasional Navy training missions.

Whether at home or abroad, VR1 does not fly exclusively from one military air base to the next. Sehrt notes too that schedulers will select lower-cost fuel stops wherever possible.

The squadron's 3 C37Bs are almost identical. Two aircraft have seating for 12 passengers, while the other is configured for 14.

Pilots give the C37B's PlaneView avionics suite high marks for situational awareness and ease of use.

All VR1 aircraft are equipped with specialized avionics, much of it classified. C37B cabin avionics include DirecTV, a Magnastar digi-

tal system, high-speed data (HSD) and 4-channel satcom. Given the nature of VR1's mission, secure communications and data transfer are essential. An onboard communications station encrypts data in/out via ground stations.

Maintenance and missions

Aircraft maintenance is performed by a mix of civilian contractors and military personnel. Contractor logistics support (CLS) on the C37B is Gulfstream, while military personnel augmented by TSM contractors are responsible for C20D maintenance.

Gulfstream employs 15 maintenance personnel at ADW. Leading the Navy C37 CLS Program team is Site Mgr Sean Strudgeon, a 15-year Gulfstream employee who was based at SAV (Savannah GA) until 1998. All 14 licensed A&Ps reporting to him are civilians with military experience. The team works 2 basic 10-hr shifts but works around the customer's schedule as required. Technicians are on 1-hr recall and are available 24/7.

Strudgeon's team carries out A checks every 500 hrs and C checks every 12 months. The ADW facility can carry out nondestructive testing, but all work on major structures—or essential repairs following lightning strikes or hail damage—is done by Gulfstream SAV.

VR1's C37Bs are on a corporate maintenance program, says Strudgeon. He describes VR1 as resem-

bling a Part 91 operation "except the customers are military." Dispatch reliability rate is close to 100%.

The Gulfstream team has received FAA's Diamond award for maintenance excellence 5 times in the past 6 years. Artman pays tribute to Strudgeon's team when he says, "VR1 is privileged to serve with—and learn from—the professionals at Gulfstream."

A civilian contract to maintain the C20Ds was due to be implemented in Oct 2008 but was challenged with no firm timetable for settlement. In the interim, military maintenance personnel manning has decreased from 70 to 20. For now, these 20 personnel—augmented by 6 TSM contractors—are conducting all C20D maintenance.

Artman speaks highly of the C20D maintenance team, describing them as "absolutely first class." He praises their professionalism, dedication and commitment to excellence, noting that they "use the tenets of operational risk management, informed by ongoing assessments of capacity, expertise and human factors."

Master Chief (AFCM) Ray Cangelosi (USN) has served as senior enlisted maintenance advisor since reporting to VR1 in May 2007. He has also been instrumental in ensuring that high maintenance standards continue to be upheld during the contract dispute period, despite the significant reduction in manpower.

Maintenance material control officer (MMCO) Lt Jim Baldwin (USN) oversees all C20D/C37B maintenance. He has over 25 years of USN service and has been with VR1 for almost 18 months.

As contracting officer representative (COR), Baldwin is responsible for contractor logistics—including satellite and wireless maintenance issues—and ensures proper execution of contracts. More than 40 personnel report to him, including onsite Gulfstream and TSM employees.

Baldwin has funding authority and determines the validity of requests up to \$25,000—above that he refers issues to the type commander (TYCON).

He describes his job as unique and challenging: "The operational demands and unique mission of this command—they're what make this tour rewarding."