

INDIAN FLANKERS AT RAF CONINGSBY

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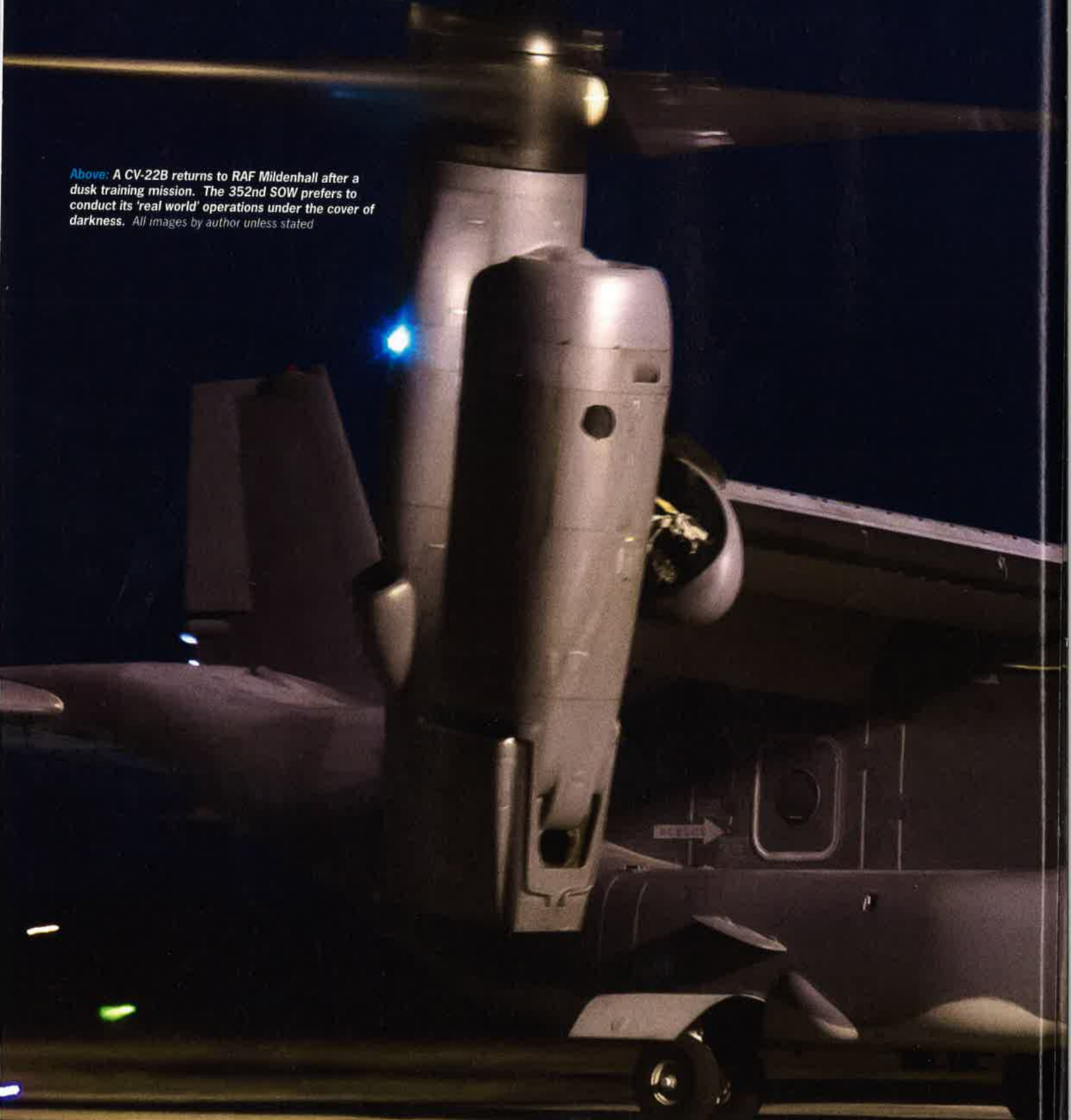


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A Special B

Above: A CV-22B returns to RAF Mildenhall after a dusk training mission. The 352nd SOW prefers to conduct its 'real world' operations under the cover of darkness. All images by author unless stated



Breed

Gert Kromhout visits Mildenhall's 352nd Special Operations Wing to see firsthand how the unit operates with its new CV-22B Ospreys and MC-130Js.

FOR YEARS, US special operations units have been among the most heavily tasked in the war on terror. The UK-based 352nd Special Operations Wing (SOW) at RAF Mildenhall, Suffolk, is no exception. Without taking a break in operational commitments, the two aircraft squadrons of the 352nd have recently replaced their old Lockheed MC-130P Combat Shadows and MC-130H Combat Talon IIs with the MC-130J Commando II and Bell-Boeing CV-22B Osprey respectively. In the meantime, both squadrons have been expanding with more aircraft and personnel.

The 7th Special Operations Squadron (SOS) is to receive ten CV-22Bs to replace four MC-130Hs. Seven have been delivered to date. Sister squadron the 67th SOS has disposed of its six MC-130Ps and is now flying seven of the ten

MC-130Js it is scheduled to receive by 2016.

The new aircraft and unit expansion are part of a revitalisation programme of Air Force Special Operations Command (AFSOC). Until recently, the 352nd SOW was known as a Special Operations Group.

Because of the unit expansion, AFSOC decided to upgrade the unit to wing status. The 352nd reports to Special Operations Command Europe (SOCEUR) in Stuttgart, Germany, which is a subordinate command of US European Command (EUCOM). SOCEUR controls all special operation forces in Europe. Other components are Navy SEALs of Unit 2 (Special Warfare Unit 2), the 1/10 Special Forces Group of the US Army and the SOCEUR Signal Detachment, all based near Stuttgart. The 352nd SOW has two additional opera- ▶



tional squadrons which are not equipped with aircraft: the 321st Special Tactics Squadrons (STS) and the 352nd Special Operations Support Squadron (SOSS). The 321st STS contains specialists such as forward air controllers, para-rescue jumpers and combat weatherman. These air commandos are the primary 'customers' of the 7th SOS and 67th SOS. As well as the 352nd SOSS which provides in-garrison and deployed command and control operational support, for the two flying squadrons and the STS.

Other Aircraft

According to Lt Col John F Peak, until late May the commanding officer of the 67th SOS, the missions of his squadron remained basically the same after the introduction of the new Hercules variant.

He explained: "What did change was that we can perform them much better. Our missions are infiltration/exfiltration of special operations forces in hostile or denied territories, SOF resupply, air drops, FARP [Forward Arming and Refuelling Point], and air-to-air refuelling of tiltrotors (TAAR) and helicopters (HAAR). With the MC-130J came the capability to employ the Maritime Craft Aerial Deployment System. With this system, we can drop the Rigid Hull Inflatable Boat (RHIB)."

At first sight, you would think that the conver-



Above: Lt Col John Peak, who until May of this year was commanding officer of the 67th SOS, started his career as a navigator with 17th SOS at Kadena, Japan. He was later assigned to the 9th SOS at Eglin AFB and, the 550th SOS at Kirtland AFB, New Mexico. He was Combat System Officer with the 67th SOS. **Right:** Combat controller Capt Jeffrey Falcone, director of operations for the 321st Special Tactics Squadron.



Above: In the US armed forces, only the C-130s of the AFSOC are capable of aerial refuelling. The aircraft are equipped with receptacles to 'take on gas' from boom-equipped tankers such as the KC-135R.

sion from one C-130 variant to another is rather simple, but Lt Col Peak strongly denies this.

"Lockheed Martin should never have named the J-model the Hercules too, because it is a completely different aircraft. Compared with the Combat Shadow, the Commando II is in many ways better. In fact, I really cannot even

give one characteristic in which the Shadow was better. What a plane the J-model is, I can talk for hours about it. We fly higher, faster and further with a maximum take-off weight that is 9,000lbs more than with the MC-130P. The maximum weight for a tactical landing is no less than 12,000lbs more. The J is very reliable."

He also praised the digital avionics and mission systems that are much more modern than the analogue systems of the Shadow. The consequence is that the composition and background of the crew members are totally different.

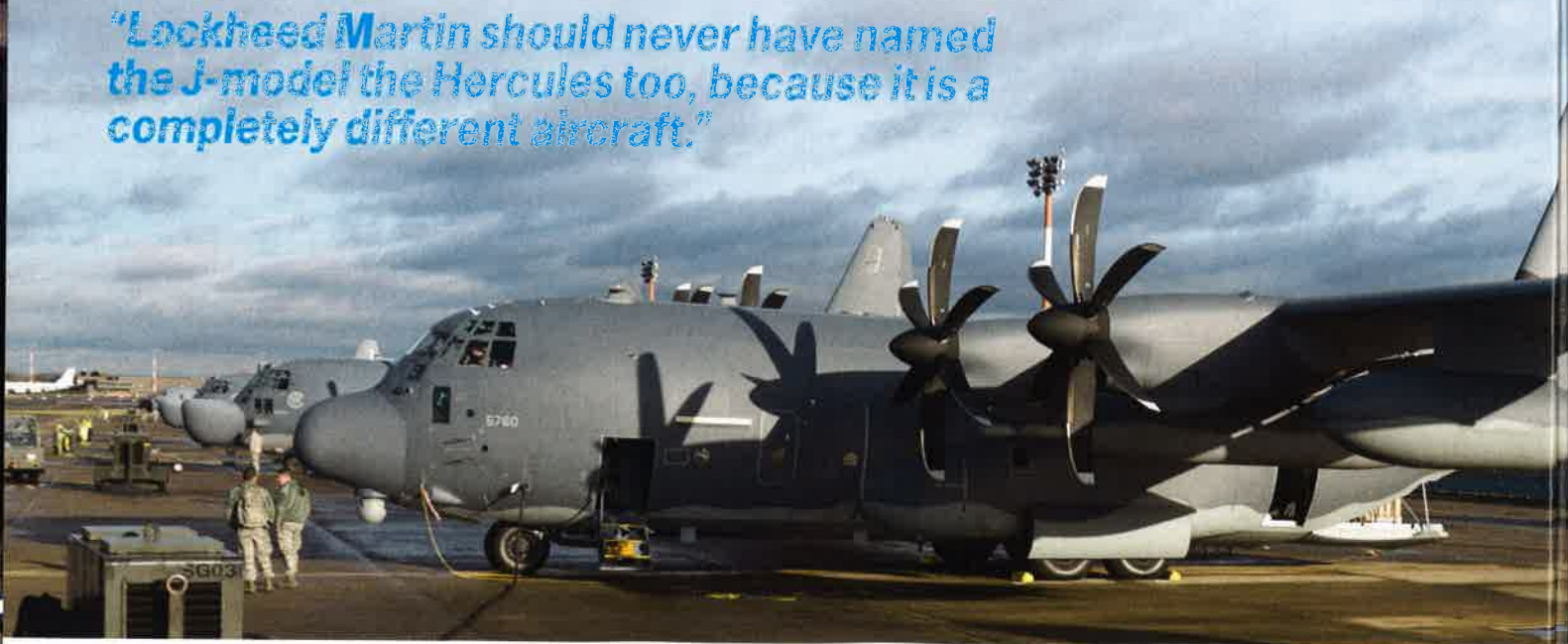
Lt Col Peak continued: "In the Shadow, we had a pilot, co-pilot, a flight engineer [FE], two navigators, two loadmasters and a radio operator. That counts eight. The MC-130J needs only five; the pilot, co-pilot, a Combat Systems Officer and two loadmasters."

New Culture

In the MC-130J, everybody has more responsibilities and, according to Lt Col Peak, that works fine. "The loadmasters, for example, have taken over certain tasks from the FE. They are experts with the aircraft systems and they do the preflight. They are also responsible for the maintenance on the flight line. In the MC-130P, that was the task of the FE. The tasks of the radio operator



"Lockheed Martin should never have named the J-model the Hercules too, because it is a completely different aircraft."





Above: A CV-22B takes on fuel while another Osprey awaits its turn. The MC-130Js still utilise ageing refuelling pods taken from MC-130Ps. There is one high-speed pod to refuel tiltrotors and a low-speed pod to refuel helicopters. The MC-130Js of the 67th SOS carry both, to increase flexibility.

Below: Lt Col Bradley C Downs, the commanding officer of the 67th SOS.



and a part of the navigation are now for the CSO.

"Another example is the control of the hose/drogue aerial refuelling system. That was also a job of the FE but in the MC-130J, it is the job of the CSO. The new systems allow the pilots more time to do navigation partly by themselves."

The personnel have backgrounds in the Shadow, Talon II, Pilatus U-28, PZL M28, AC-130 gunship, regular C-130s and even the Lockheed C-5 Galaxy. That variety is not a problem at all for Lt Col Peak: "The different cultures have various ways of doing things. All together, they fully exploit the capabilities of the MC-130J."

Lt Col Peak contends that because of the increased crew responsibilities, the demands on training and selection have become higher. "This aircraft needs a special breed of people from whom we ask a lot. Thankfully, AFSOC is blessed with a splendid training pipeline."

Because of the strongly varied crew composition and responsibilities, a distinct Commando II culture is now coming into existence. "In the Shadow community, once you flew that aircraft your next assignment would usually be the Shadow again. It was really a community where everybody knew each other."

Lt Col Peak says that it was not an option to transition only Combat Shadow crews to the

Commando II. "On the one hand, because we did not get a stand-down period and we had to keep fulfilling our operational commitments. On the other hand, because not only this squadron, but the whole AFSOC, is expanding."

The 67th is otherwise the first expanded overseas AFSOC squadron that ultimately counts ten aircraft.

Incredible Experience

For the 7th SOS, the conversion was probably even more difficult. Lieutenant Colonel Roy Oberhaus, commanding officer of the 7th SOS, said: "What it boils down to is that we had two squadrons in one. The CV-22B squadron was building up while the MC-130H squadron was running down. The crews, aircraft and maintenance of these two types were completely different. We had two different cultures that each had their own way of working. That sometimes conflicted."

Lt Col Oberhaus is wildly enthusiastic about the CV-22B. He is a former helicopter pilot and previously flew Sikorsky MH-53 Pave Lows at Mildenhall. "For a helicopter pilot, the capabilities of the Osprey are truly amazing. You can fly at 230kts and still have the possibility to land vertically. That is an incredible experience."

Infiltration/exfiltration (infil/exfil) is the



Above: Chasing another MC-130J to a low-level training area in Wales. The pilots have HUDs, digital maps and electro-optical/infrared displays on the instrument panel. Both pilots are wearing NVGs.

Left: An MC-130J with two MC-130H Combat Talon IIs behind, parked on the 352nd SOW flight line. This picture was taken one day after the last pair MC-130Hs of the 7th SOS had returned from their final operational deployment in December 2014.

Right: A CV-22 lands on the main runway at Sculthorpe. The site is just ten minutes flying time from RAF Mildenhall. Marco Dijkshoorn



Lt Col Peak said: "We have done the transition with a minimal complement. Normally, a squadron has a turnover of about 30% per year. We had a turnover of 84% in a little bit more than a year! To manage that while we did our normal commitments was very difficult, but we came through with flying colours."

Lt Col Peak said: "I have been hard on my people sometimes and I keep pushing them, but I also remind them of the fact they are privileged. They fly brand new aircraft, with that typical new aircraft smell, in Europe. They experience that only once in their career, if they are lucky. You cannot get a better assignment than here."

Wanted

One would expect that the operations tempo would go down now the US has dramatically reduced its presence in Afghanistan, but according to Lt Col Peak, the opposite is true.

"The squadron has its highest operations tempo in the more than three years I have been here. Previously, the tasking was divided among the two Hercules units with a total of ten aircraft. However, the 7th SOS said farewell to the Hercules in early January 2014.

"That implies that all specific Hercules tasks

fall on our shoulders while we are not yet at full strength. Moreover, everyone is getting more and more aware of the reliability and capabilities of the MC-130J and is eager to use it. That is really good because it is nice when you are needed."

Initial operational capability was reached with three aircraft in January 2014. "A couple of weeks later, we were assigned an intensive operation that we executed very well," said Lt Col Peak. "That not only says a lot about the motivation of the crews and the capabilities of the aircraft, but also about the training that AFSOC provides."

Most Challenging

According to Lt Col Peak, the biggest challenge out of all the missions is low-level flying with night-vision goggles over uneven terrain and in adverse weather conditions.

"In the MC-130J you don't have, as in the MC-130H, a dedicated terrain following and avoidance radar [TF/TA]. This radar warns the crew of approaching obstacles. In the MC-130J, we use the moving map as a terrain following system, which needs a continuous dialogue between the pilots and CSO. This TF system is basically a database that looks at ▶

SAR

The 352nd can be tasked to work in the geographical combatant commands EUCOM, Africa Command (AFRICOM) and Central Command (CENTCOM).

Lt Col Oberhaus says: "We spend most of our energy in improving interoperability with our NATO partners, developing enduring relationships."

The 7th SOS has sent crews in combat deployments but he could not give details for security reasons. The 352nd often deploys aircraft and personnel primarily to the eastern European countries for exercises. With the arrival of the Osprey, the 7th SOS added search and rescue (SAR) as secondary mission. Lt Col Oberhaus contends that they can do it faster, better and with fewer assets than with helicopters. He recalls a rescue mission on December 10, 2008 in the Atlantic Ocean west of Ireland. The USAF carried out that mission from the UK with three MC-130s and a KC-135 from Mildenhall and two Sikorsky HH-60s from nearby RAF Lakenheath – see *Pave Hawks Marathon Mercy Mission*, February 2009, p4. The operation lasted ten hours.

Lt Col Oberhaus said: "We do that in 4.5 hours with just two Ospreys and one MC-130J. What's more, planning such a mission is much less complicated because fewer aircraft and people are involved."

The USAF is currently investigating the possibilities of the CV-22 for Combat SAR.

The 352nd always has CV-22s and MC-130Js on alert for any contingency, including SAR. He could not comment on the level of readiness, only that his men are on a string. In 2016, the wing will be part of NATO's Response Force that is capable of deploying a considerable force of aircraft and ground troops in a couple of days. Lt Col Brad Downs, who succeeded Lt Col Peak as CO of the 67th in late May, states that will not change anything. "We are constantly on a very high level of readiness and can react quickly to any contingency."



Above: A Flight Engineer operates the .50 caliber machinegun. Critics have suggested the Osprey has insufficient self-defence management but, according to Lt Col Oberhaus it relies on firepower provided by escort fighters or other air support.

Right: Special tactics personnel such as this combat controller are highly trained specialists and regularly deploy with army commandos and SEALs. Marco Dijkshoorn



primary mission for the CV-22. "We do that in all kinds of weather conditions, high and low altitudes, in the mountains, quick or slow. Our defensive systems and ramp-mounted machine gun allow us to penetrate in hostile or denied areas. We can deliver people by the fast-rope method, with parachutes, or just land the plane. Landing in brown-out or white-out conditions is so easy because we can hover without looking to the ground. The head-down displays and hover symbology provide us ample information to do that."

The CV-22 has a crew of four: pilot, co-pilot and two FEs. One of the FEs is seated in the middle, immediately behind the two pilots. He deals with a variety of systems, including fuel, hydraulics and navigation. If something goes wrong with a system, he goes through the checklists to reach a solution together with the pilots. The second FE is responsible for the cabin and machine gun. He is also the loadmaster and controls the hoist. The FEs can carry out each other's tasks. An often heard criticism about the Osprey is its lack of self-defence weapons because the sole machine gun on the back ramp can give protection only to the rear of the aircraft. The Marines are working on rockets and additional guns but the air force is not, according to Lt Col Oberhaus.

"Our mission is different. We rely on air support from gunships or other close air support means. Our combat load is somewhere around 4,000lbs with a full bag of gas.

Putting more guns or other weapons on it means additional weight and subsequently degrading the cargo/personnel capability.

The V-22 Osprey has had a troubled history with some deadly accidents and low maintainability. However, the operators, including Lt Col Oberhaus, are enthusiastic about the aircraft and its capabilities.

"The accidents both the US Marines and air force have been involved in were mainly caused by human errors. Concerning maintenance, it used to be a maintenance-heavy aircraft, but that is logical because it is new technology with unique features. The Osprey is a network of systems connected through data buses, computers and hardware. Everybody who builds networks in an office knows that it is a complex operation. There are always issues, bugs to work out, and things to



Above: A CV-22B hoists two special tactics operators towards the rear ramp during a dusk training mission at Sculthorpe. The 352nd SOW uses the disused RAF base regularly for practice missions.

learn about how that network works. Maintainability of the Osprey is getting better and better."

Privileged

According to both Lt Col Peak and Lt Col Oberhaus, the build-up of the renewed



Above: Lt Col Roy Oberhaus, commanding officer of the 7th SOS. A former helicopter pilot, he previously flew MH-53 Pave Lows with the 21st SOS at RAF Mildenhall.

Below: An Osprey speeds over East Anglia at low level. Its enormous twin rotors arcing against a threatening sky.

squadrons is still a time-consuming and a difficult process. The fact that both squadrons remained operational since the very start of the conversion, with all the commitments involved, was and is, quite a challenge.

Lt Col Peak said: "As far as I know, it is the first time in the history of AFSOC that this happens. Other squadrons were 'offline' for at least half a year to focus totally on the transition to a new type. We never got a break. It was always 'mission first' and [we] did our deployments and operations as always. That is the consequence of operating low density, high-demand platforms such as the MC-130."

Due to security reasons, Lt Col Peak did not disclose where these deployments were to or what these commitments were, but that is not difficult to guess with all the ongoing operations in Afghanistan, Iraq, Syria and the African continent.

The last Combat Shadow left Mildenhall on January 8, 2015 – see *Last USAF MC-130H Leaves Mildenhall*, March 2015, p7. All 67th SOS Combat Shadow crews transitioned to the J-model, but not all returned to the squadron.

"We can do AAR as low as 500ft, or even lower, terrain permitting"



352ND SOW MILDENHALL

the altitude of the airplane, the location of the plane and to the characteristics of the surface.”

The TF/TA capabilities that distinguish the Talon will be added in the future. Two aircraft are currently acting as test beds for a new system developed by Scientific Research Corporation of Atlanta, Georgia. The projected in-service date is 2017.

Lt Col Peak said: “Low flying at night can be really challenging for us but even more for the helicopters and tiltrotors that have to be plugged-in for refuel at 115kts. We can do AAR as low as 500ft, or even lower, terrain permitting. The good thing about the MC-130J is that if you push the throttle, you go up like a rocket. It all comes down to training, and that is what we do a lot and usually at night.”

Special Tactics

Inextricably bound up with the 67th and 7th SOS is the 321st Special Tactics Squadron (STS). This squadron does not have any aircraft. It provides a fast reaction, rapidly deployable force capable of establishing positive control of the air-to-ground interface during special operations.

Unit combat controllers and pararescue-men (parajumpers or PJs) conduct the reconnaissance, surveillance, assessment and establishment of assault zone sites and provide air traffic control and long-range secure command and control communications.

Additionally, the unit provides combat trauma medical care, personnel recovery and terminal attack control of munitions delivered by fixed- and rotary-wing aircraft.

Director of Operations of the 321st STS Captain Jeffrey Falcone is fond of both the MC-130J and the CV-22.

He said: “The MC-130J changed a lot for us. It is nicer and newer, can carry more cargo, and fly higher than the aircraft it replaced. Its biggest thing is that it is so much faster and jumping from it is easier. The CV-22 is phenomenal because it can land vertical and fly like an aircraft.”

Capt Falcone said the air commandos are the



Above: Ospreys wait for their next call to action on Mildenhall's main ramp. This was a rare moment of downtime for aircrews whose missions take them across Europe and beyond.

air force ground special operations force that supports air force, army and navy operations. “Sometimes, we are attached to army troops when air to ground support or airlift is involved in their operations. Some of the combat controllers are Joint Terminal Attack Controllers (JTAC) who control close air support. The PJs are specialised in battlefield trauma treatment.”

Because the 321st supports the other services, they must keep abreast of their activities. “We do a lot of water work and use equipment such as wave runners, Zodiacs, scuba gear and our PJs and combat controllers attend the combat dive school,” said Capt Falcone.

“We are also using dirt bikes and Humvees. We can infiltrate by air with various parachute techniques. Everybody is able to perform all competencies.”

The 321st designates certain periods to train for a particular mission, for instance working with the water assets. It takes a lot of time to stay current on all these areas of expertise. Capt Falcone said: “It depends on the type of skill. Some skills need to be done once a year, some once a month. We have people working almost continuously with the army and navy forces and partner nations in Europe. It is fun and very rewarding working with other countries. You work with them in their countries, see their skills, trade ideas.”

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To Germany

The training opportunities in UK are outstanding. MOD Sculthorpe in Norfolk is the main training base. The squadrons also make extensive use of the low-flying areas in Scotland and Wales.

Both Lt Col Oberhaus and Lt Col Downs state that low-level flying at night at altitudes as low as 300-500ft (90-150m) is a demanding discipline. For Lt Col Oberhaus, even the typical tricky British weather conditions are sometimes appreciated.

“We use the weather in our operations. Whether we go in low or high depends on a lot of parameters such as weather, threats, and environment.”

The wing is slated to move to Germany before the end of the decade and, according to Lt Col Downs, that offers opportunities and challenges. “Germany has some outstanding training areas, including an electronic warfare range. It is also located much closer to the special forces that we work with.

However, low-level flying such as in the UK is not possible. The 352nd SOW public affairs office said that the wing is currently working through opportunities to ensure that all training objectives will be met. USAF leadership is working with the German government to co-ordinate requirements. That is one of the subjects of an air base survey that is currently being conducted. A part of the solution is the simulator. Lt Col Downs said that they do not have one at Mildenhall “but we get one at Spangdahlem.”

According to Lt Col Oberhaus, there are quite a few items on the strategic and political level that need to be sorted out. “But my understanding is that we move to Spang, one way or the other.” ■



Right: As the glow of the cabin light illuminates the faces of the special operators, an Osprey crew makes last minute adjustments to their flight plan before another night training sortie over Norfolk.