

# UNITED STATES OF AMERICA

## BMUP+ AND LSRS: ANOTHER USN SPECIAL PROJECT

- JAAP DUBBELDAM

### PART 2

#### P-3C Orion BMUP production and known squadron assignments

160293 sep02 **BMUP** mod; jan01 NAWC-23  
161001 jul03 **BMUP** mod; oct03 VP-64 LU-001; oct04 VP-66 LV-001; nov04 VP-69 PJ-001; may08 Whidbey (VP-69) 001  
161121 apr06 **BMUP+** mod; jun08 CMO-10 121; oct09 VQ-2 121; nov09 VP-45 121; oct10 Whidbey 121; feb11 Kaneohe Bay  
161126 jan05 **BMUP+** mod; oct05 VP-40 126; apr07 VP-26 126; dec07 VP-40 126; ..08 grounded; sep08 VP-46 126; nov09 Hagerstown 126



ABOVE LEFT - "Marlin09" was P3C BMUP+ 161126, and is about to touch down at Lajes on 6th December 2007 while en route from Sigonella to Patuxent River (photo P-3 Orion Research Group) ABOVE RIGHT - Clearly visible are the LSRS pod and the ARC-182 antenna under this BMUP+ 161132, while departing RAF Mildenhall on 14 April 2007 (Dougie Couch)

161127 jul03 **BMUP** mod; oct04 VP-92 LY-127; sep07 VP-8 127; may09 VP-16 LF-127  
161129 feb01 **BMUP** mod prototype; 08feb01 NFATS 129; nov02 VP-66 129; jun05 VP-62 LT-129  
161132 oct05 **BMUP+** mod; oct05 VP-8 LC-132; nov06 VP-10 LD-132; apr07 VP-26 132; dec07 VP-40 132; sep08 Brunswick 132; jul09 Hagerstown 132  
161329 jul03 **BMUP** mod; oct04 VP-92 LY-329; nov04 VP-62 LT-329; jul08 VP-45 329; feb10 VP-8 329; may10 VP-62 329 CPRW-11 tail markings  
161339 oct05 **BMUP+** mod; oct06 VP-8; apr07 VP-26 339; may09 VP-45 LN-339; jun09 VP-10 339  
161404 apr06 **BMUP+** mod; apr07 VP-1 404; aug07 VP-26 404; jul08 VP-16 404; feb10 VP-8; dec10 VP-4 404  
161405 jan04 **BMUP+** mod; oct06 VP-40; nov06 VP-8 405; dec07 VP-40 405; apr09 Hagerstown 405; jan10 VP-46 405; oct10 Jax 405; nov10 VP-8  
161408 oct02 **BMUP** mod; nov02 VP-66 LV-408; nov04 VP-69 PJ-408; sep07 Brunswick 408  
161409 jul03 **BMUP** mod; aug03 VP-66 LV-409; apr06 VP-62 LT-409  
161411 jan02 **BMUP** mod; dec02 NAWC-23 ?  
161412 jan03 **BMUP** mod; jun07 VP-92 LY-412; aug07 VP-69 PJ-41  
161414 apr06 **BMUP+** mod; oct06 Brunswick 414; may07 VP-26 414; sep08 Brunswick 414; oct09 Whidbey 414; nov09 Hagerstown 414; may10 VP-46 414  
161415 jun05 **BMUP+** mod; jul05 VPU-1 415; oct06 VP-10; feb07 VP-40; feb08 Brunswick 415; jun09 VP-8 415  
161586 apr06 **BMUP+** mod; oct06 VP-8 586; oct06 VP-10 586; may08 Greenville; sep08 VP-26 586; ..09 VP-8 LC-586; jun10 VP-9 586; dec10 VP-4 586  
161587 oct05 **BMUP+** mod; feb06 Whidbey 587; oct06 VP-46 587  
161588 oct05 **BMUP+** mod; may06 Whidbey 588; oct06 VP-40 588; aug07 VP-1 588; nov07 VP-40 588; may08 Greenville; sep08 VP-46 588; jan09 VP-40 588; may09 VP-10 LD-588;  
161589 sep05 **BMUP+** mod; oct05 VP-46 589; dec07 VP-40 589; may10 VP-46 589  
161590 sep05 **BMUP+** mod; oct06 VP-46 590; may08 Greenville; oct08 Whidbey 590; jan09 VP-40 590; may10 VP-1 590; oct10 Jax 590; nov10 VP-8 590  
161593 jan04 **BMUP+** mod; jun05 VPU-1; sep05 VP-8; aug07 VP-1 593; jun08 VP-46; sep08 VP-8 593  
161595 jul03 **BMUP** mod; may05 VP-66 LV-595; jun05 VP-69; feb07 VP-46; ...08 grounded; oct09 storage Whidbey 595;

oct10 VP-62 LT-595

161596 oct05 **BMUP+** mod; oct06 VP-10; aug07 VP-26 596; nov07 VP-8 596; dec07 VP-40 596; may08 Greenville; aug08 VP-26 596; jul09 Hagerstown 596; dec09 VP-1 596; oct10 Whidbey 596

#### Notes:

- 1) All 15 BMUP+ BuNos mentioned have positively been seen with an LSRS pod; the sixteenth example is yet unknown
- 2) If a BuNo is underlined the aircraft has been seen with a MWR system (cats-eyes)
- 3) The first mentioned date is the date on which the aircraft has first been reported as a BMUP Orion
- 4) If an aircraft is reported at Jacksonville, Brunswick or Whidbey Island, no squadron assignment was reported
- 5) If an aircraft is reported at Greenville, SC, it was seen with L-3 Communications
- 6) Aircraft noted at Hagerstown were involved in the wing strengthening program
- 7) All dates are not the official dates, but are based on sightings throughout the years



ABOVE LEFT - P-3C BMUP 161329 is assigned to VP-62 but is frequently used by other Jacksonville based VP-squadrons. The markings on the tail are those of CPRW-11, which were first noted in February 2010. This picture was taken at Lajes on February 25th 2010. During this visit the crew used a VP-8 call sign (photo P-3 Orion Research Group). ABOVE RIGHT - 161412 is a standard BMUP P-3C Orion which is operated by one of the US Navy Reserve squadrons. It was photographed at RAF Kinloss in May 2006 in the markings of VP-92 and it is now based at NAS Whidbey Island with VP-69.

#### Development of LSRS

About the actual development of the LSRS system little is known and therefore this chapter will give a rundown of facts which have become known throughout the years. Roughly the development was as follows: the canoe shaped pod was first seen under a NP-3B, later P-3C Orions were seen with the pod in combination with extra air intakes just in front of the wing, then the shape of the pod was altered a little without the extra air intakes and finally the pod appeared in the shape as it is now attached to the belly of the P-3C BMUP+ Orions.

Although the first operational deployment of P-3C BMUP+ Orions, equipped with the LSRS pod, was in 2006, the combination P-3/LSRS has a long history. During 1978, while the P-3C production was in full swing and the BMUP modification had not been heard of, a P-3B Orion with a canoe shaped pod underneath the fuselage was first seen at Dallas Love Field, Tx. An unconfirmed report mentions a similar Orion which was seen landing at Palmdale, Ca. in the middle '70s. The same source recalls it was being constructed at Burbank, Ca. According to an official Lockheed production list dated January 1988, P-3B BuNo 152739 was first assigned to the PMTC on April 9th, 1978.

In fact Military Aviation Review June 1978 portrayed a picture (in black and white) taken at Dallas, of P-3B BuNo 152739 with a canoe shaped pod underneath the fuselage. This same aircraft was also pictured in the 1986/87 edition of 'Jane's All the World's Aircraft'.

During the 1980s NP-3B 152739 was reported several times at NAS Point Mugu, Ca, and it was logically reported assigned to the PMTC. However, other sources state that it was only visiting Point Mugu when using the Pacific Missile Range for a specific test so it is not likely that it was ever assigned to that unit. This same NP-3B was also seen at NAS Brunswick, Me, several times, which probably means that VPU-1 was also involved in the development of the LSRS system.

Reported as Special Project aircraft (replacement) for NASC at Dallas Love Field, Tx, in 1992, were P-3B BuNo 153414 and P-3C BuNo 161410. P-3B 153414 was subsequently flown to AMARC for storage September 28th 1993. In February 1993 P-3A BuNo 152158 was first reported with NAWC-23 as a non-flying special-purpose aircraft. A list in the Lockheed magazine "Patrol Log" in 1994 mentions the following aircraft with NAWC-23: P-3A 152158: non flying; NP-3B 152739; P-3C 161410.

Although no official confirmation is available, it is most likely that P-3C BuNo 158574 was assigned to the project late 1997, when the

NP-3B ran out of hours and was subsequently deleted from the inventory during 1998. This P-3C Orion has not been reported anywhere since September 1997, when it was last reported with VX-1.

In 1996 a P-3C with a canoe shaped pod and large air scoops on both sides of the fuselage was first seen at Dallas Love Field, at various times. This same Orion was also seen at NAS Oceana, Va, during a major exercise off the east coast of the USA in 1996 and it was photographed at MCAS Cherry Point, NC on 14th May 1997. From 1997 until 2004 P-3C BuNo 159887 was also listed with NASC-FS at NAS Point Mugu, Ca. There is no confirmation whether it ever operated from Dallas Love Field. In 2004 it reappeared again when it was first reported being converted to an EP-3E Aries II.

Operating out of NAS Moffett Field, Ca, from October 1st until 10th 1997 was an unidentified P-3C without a MAD boom but with a canoe-like container underneath the fuselage, and large air intakes on both sides of the fuselage between the cockpit and the wing. Also present was a P-3B without a MAD boom, which was reported as 152739, but without the canoe-like container. Neither aircraft wore any kind of markings or serials and both were in a light grey scheme. According to the photographer of both aircraft the P-3C was 161410. Another source confirmed that BuNo 161410 was the only Orion with the air scoops. Sometime in the year 2000 a P-3 with air scoops on the side of the fuselage was last seen performing touch and goes at NAS Point Mugu, Ca.



ABOVE LEFT - With the LSRS pod beneath the fuselage, P3C BMUP+ 161405 is seen about to declare "on deck" on December 6th 2007 as "Marlin00" at Lajes. ABOVE RIGHT - Orions with the LSRS pod are a rare sight for many of us. It is even rarer to see two of these photographed at the same time. This picture was taken at NAF Kadena in Japan in January 2011 and shows 161404 and 161586, both with VP-4 squadron markings.

The following comment was received from the person who photographed a P-3C Orion with air scoops in October 1997: "As a bystander, I observed the 'Operators' of that P-3 on several occasions. That 'Group' has a lot of 'clout' to get TOP PRIORITY for flight planning, field services, support and security. It is their desire to draw the least amount of attention to themselves. By the way, NAWC-23 is just the official custodian code of the aircraft for funding of logistics and maintenance. The real operators are somebody else, and they are really sensitive about it too."

The former Update III prototype BuNo 161410 was assigned to a classified project in October 1984 and in 1991 it is reported assigned to the NASC-FS *Project Gayfeather*. It was dropped off the annual US Navy inventory list sometime in 1992. Additional information revealed that 161410 was still active in 2004, although it was reported scrapped by direction in 2003. This aircraft was however still very sensitive and involved in a black program. It never left US Airspace and it was described as "the grand poobah of ELINT". It reappeared again on an official inventory list dated November 8th, 2004. It was then reported as an NP-3C, which at that moment was assigned to NASC FS and based at Waco, Tx. It was being converted to EP-3E Aries II and after conversion it was assigned to VQ-1. This probably happened after the first production BMUP Orions became available in 2001. The first BMUP Orion with an LSRS pod was photographed at Dallas Love Field in January 2001. We assume this may well have been BuNo 160293.

Again there is no official confirmation, but the lack of any sightings of BuNos 160293 and 161411, since 1992, point in the direction that these two BMUP Orions are flying out of Dallas Love Field without any external serial numbers. Local observers always mention three mystery aircraft at Dallas Love Field, which may mean that BuNo 158574 is the third Orion involved. And there is always the possibility that one of the P-3C Orions is used as a non-flying special-purpose aircraft. The fact that the LSRS system was developed as a "deeply, deeply classified system" will be the reason that none of the above information has ever been officially confirmed.

An article in *Aviation Week & Space Technology*, February 19, 2001, tells about "a three-aircraft unit which is involved in the Navy's first full-fledged attempt at building "smart planes" capable of sophisticated fusion of sensor data. The goal of that program, part of which has been dubbed Hairy Buffalo, is to create a system that can quickly find moving targets on land, water or under sea." "The team wants to explore antennae innovations and configurations that can be mounted in pods beneath the aircraft." A picture of an Orion, illustrating the article has the following text: "Two NP-3s are being fitted with fiber-optic backbones to permit quick-change installation of

computers and sensors for finding moving objects.”

P-3C BMUP+ BuNo 161415 was assigned to VPU-1 at NAS Brunswick, Me, since June 2005, and was noted between July 2005 and July 2006 operating with the LSRS pod out of the hangar which was then used by VPU-1. This may well have been a final test of the system before the first operational deployment of the LSRS system by a VP-squadron could take place in late 2006.

The existence of the LSRS system became widely known after August 15th, 2006. On that day one of the unmarked Orions from Dallas declared an in-flight emergency over Tucson, most likely after a lightning strike. It was vectored into Davis-Monthan AFB, Az. where it was photographed shortly before landing with an LSRS pod and a badly damaged nose radome. The identity of this Orion still remains a mystery. The visit of P-3C Orion BuNo 161132, equipped with a similar LSRS pod to RAF Mildenhall on April 14th, 2007 caused quite a stir amongst the aircraft spotters in the United Kingdom. This was the first time that one of these had been photographed and seen in public outside of the US.

When 56 Orions were grounded in December 2007 and 2008 because of wing fatigue (AFB394 / “Red Stripe”) one of these aircraft was BuNo 158574. Given the importance of the LSRS project it will certainly have been given priority in repairing the parts which were effected. Two other BMUP’s were grounded as well in 2007, these were BuNos 161126 and 161595. The latter has since been reported again, assigned to VP-62.

By 2009 the LSRS radars were in such high demand that it has been difficult for the Pentagon to experiment with how they might be used in conjunction with other weapons. The Navy delayed two flight tests in Florida in which missiles were to receive LSRS targeting data. The radars were needed elsewhere. LSRS systems “are a national asset. The testing community becomes a second priority when an LSRS is needed for real-world operations”

February 2011 saw one of the Dallas based BMUP Orions being photographed at its home base. The picture showed the new IN-MARSAT AMT-50 antenna being fitted on the usual place just behind the cockpit, likewise those of VPU squadrons plus some EP-3E that have been seen with this feature, which will be spread fleet wide in due course.

So it seems that after some 35 years the unit at Dallas is still involved in the development of some kind of system and many questions remain unanswered. For years the most intriguing question has been: who operates the anonymous Orions? According to US law, civilian aircraft are required to have identification on the side of the fuselage. This leads to the conclusion that the Dallas Orions can only be operated by a military organization. This should rule out Texas Instruments, which is often mentioned in connection with the unmarked Orions. This company has been involved in the development of the Littoral Surveillance Radar System (LSRS) project ever since 1978. Their website gives the following information: Texas Instruments Incorporated is the world leader in digital signal processing and analog technologies, the semiconductor engines of the Internet age. TI is a leader in the real-time technologies that help people communicate. The fact that this company has its headquarters in Dallas and that the Orions operate out of an area at Dallas Love Field Tx., which is occupied by this company will have contributed to this assumption. However the Dallas Orions use radio call signs starting with Navy and then some numbers and are flown by US Navy pilots.

A quote from a local photographer in 2011:

“There is no set schedule. Based on my limited observations, I would say they make 4 or 5 day trips per week. Sometimes they leave around sunrise and other days around 10 am. I’ve seen them return around noon and also mid-afternoon. There is no set time that you can count on. The amount of secrecy is astounding. I have asked numerous airport officials about the plane including the director of airport operations and I get the same answer...”That plane does not exist.” Of course, I have the pix to prove it does but that shows the kind of mystery and intrigue that surrounds the aircraft...”



ABOVE LEFT - 161588 was the first P-3C BMUP+ with an LSRS pod to be seen at Lajes on November 30th 2007; the crew was using call sign “Marlin31” (P-3 Orion Research Group) ABOVE RIGHT - 161590 P3C BMUP+ operated by VP-1 departing Lajes on May 26th 2010 as “Navy YB590” while flying Rota-Patuxent River, showing to good advantage the Boeing antenna, hanging on the belly.

The following Orions have been mentioned in connection with the development of the LSRS system:

**152158** (5128)

**P3A** 23apr65 VP31 RP36/RP35/RP6/RP16; 16nov71 VP17 ZE4; 20aug75 VP60 LS10/LS3; 25jun80 VP90; 11jan81 VP64 LU4; jul91 SOC at Waco, TX; jan93 NAWC-23 special purpose a/c; reported as a non-flying special-purpose aircraft; jan05 fuselage noted on dump at Waco, TX

**152739** (5179)

**P3B LW** 11may66 VP9 PD-1/PD9/PD11; jul74 VP31 RP-22; **NP3B** rd with elongated ventral canoe pod; 09apr78 PMTC (for NASA & Texas Instruments); NAWC-23 EW R&D projects a/c; '92 NASC-FS; oct97 ventral canoe pod removed; '98 DFI; 23oct01 SOC; mar02 Lockheed Martin at Marietta, Ga, test bed for P-3C Service life Assessment Program (SLAP)

**153414** (5211)

**P3B LW** 27dec66 VP10; 01jan67 VP11 LE11/LE17; 13mar72 VP26 LK3; aug79 VP8 LC-85/LC-81; 05may82 VP62 LT5/5/12; feb85 VP68 LW-07; jul91 NAWC-23; 28sep93 AMARC/museum 2P101/AN2P0101; assigned to Museum of Naval Aviation (flying trader); mar03 Western International yard (no cockpit)

**158574** (5583)

**P3C** 15dec72 VP31; 01apr73 NADC; 07aug73 VP47 RD1/RD-6; 18may79 engine turbine explosion at NAF Kadena; aug89 VP-30 40/LL-40; P-3C-IIIIR mod; aug97 VX-1; sep97 NASC-FS

**159887(5638)**

**P3CI** 13may76 VP31; sep76 VP9 PD7; 22jan85 VP46; 31mar85 VP9 PD-7; 10jan86 VP31 RP-12; 30apr87 NADC; apr88 NATC FWATD; P-3C-IIIIR mod; sep90 VX-1 JA-04/04; sep97 NASC-FS; mar06 EP-3E mod; oct06 VQ-2; feb10 VQ-1 887

**160293** (5656)

**P3CII** 20dec77 VP30 LL51; 29oct84 VP5; 30nov84 VP30 LL-51; may88 NATC FWATD; sep90 VX-1 JA-02; dec94 VP-64 LU-293; P-3C-IIIIR mod; sep97 VPU-2 293; mar00 VP-4 293; sep02 P-3C BMUP mod; dec02 NAWC 293

**161410** (5748)

**P3CIII** 06apr83 Update III proto NADC; 26mar84 NATC ASW; 10aug84 NAWC-23 (classified) modified with unique elongated ventral canoe pod; NP-3C rd; '91 NASC-FS Project Gayfeather; '06 EP-3E mod; oct06 VQ-1; dec08 L-3 Com EP-3E mod; nov09 VQ-1 410

**161411** (5749)

**P3CII½** 08sep82 VP31 RP15/RP16; 21sep84 VP30 LL-30/LL67/67; jul91 VP-6; jul92 VP-10; aug95 VP-65 PG-411; sep98 VP-30 LL-3/LL-411(3); jan04 BMUP mod;



ABOVE LEFT - 161590 P3C BMUP+ operated by VP-1 departing Lajes on May 26th 2010 as "Navy YB590" while flying Rota-Patuxent River, showing to good advantage the Boeing antenna, hanging on the belly and the MWR system & the ARC-182 antennae (P-3 Orion Research Group) ABOVE RIGHT - A fine study of a P-3C BMUP+ without the LSRS pod. 161596 with VP-26 markings is taking off from NAS Brunswick on September 5th 2008 (photo by Jason Grant)

## NAWC-23

The organisation that is most likely responsible for the Orions operating out of Dallas Love Field is Naval Air Systems Command (NASC or Navair) with headquarters at NAS Patuxent River, Md. This agency provides the Program Executive Officer for Air Anti-Submarine Warfare (ASW), Assault and Special Mission Programs (PEO (A)) with procurement management and planning for all major weapons systems associated with airborne ASW and special missions programs.

Since at least 1979, NASC provides technical and material support to the Naval Air Test Centre at NAS Patuxent River, Md. and the former Pacific Missile Test Centre at Point Mugu, Ca, as well as other known test units, which do not operate P-3 Orions. It is also worth noting that many NASC aircraft are officially based at NAS Point Mugu, Ca, but that they are seldom seen at this airfield.

In 1991 the Naval Air Warfare Centre (NAWC) was created at Washington DC, with an Aircraft Division (NAWC-AD) located at

Patuxent River, Md and a Weapons Division (NAWC-WD) at Point Mugu, Ca. In 1999 NASC's website gives a rundown on Contracts, including Air Anti-Submarine Warfare, Assault and Special Missions Major Weapons Systems, under AIR 2.3. This contract was at that

time assumed to explain the title NAWC-23, which was first mentioned in 1993. The designation NAWC-23 was then given to David Reade (the author of the book 'The Age of Orion') when he kept bugging Navair about the real unit designation for the Dallas Orions.

A recent search on the Internet resulted in a website of the global information company IHS, based in Englewood, Co, containing: Industry Standard & Regulations, which produced a long list of regulations, including the following:

EN-(NAWC-23) procurement issue and control of special flight test instrumentation; Publication Date: Mar 16, 1992; and

EN-(NAWC-23A) policy and procedures for navair controlled aircraft provided by the government to non-military organizations; Publication Date: Aug 18, 1993;

For now the conclusion is that these two regulations may well be the reason why someone at NASC in 1993 invented the fake-designation NAWC-23 for the unit at Dallas.

However only recently it was revealed that the official name of the unit that flies the Orions from Dallas is Bureau of Personnel Sea Duty Component DALLAS (BUPERS SDC DALLAS). For a few years when the Bureau of Personnel was known as Navy Military Personnel Command (NMPC), the unit was known as NMPC Det Dallas.

Bupers SDC Dallas is described on the internet as a critical CAT 1A CNO special project unit. A further Google search resulted in two other Bupers: Bupers SDC Point Mugu, Ca. and Bupers SDC Det Pax.

The non-military organization involved would be Texas Instruments and the number of P-3C Orions involved in September 2010 was four. Whether or not all four were operational is unknown.

All reference to the Dallas Orions being assigned to PMTC, NASA or the CIA is now considered to be incorrect. And although we now know that the anonymous Orions at Dallas are operated by BUPERS SDC DALLAS, we will keep referring to the unit as NAWC-23.



These two detail shots of NAWC-23 Orions were both taken at Dallas Love Field in September 2006 and February 2008. Close inspection reveals that these cannot be the same aircraft. It is an evidence that the unit at Dallas utilizes at least two different P-3C Orions. (both pictures by Timothy Perkins)

### **BMUP+/SLRS in action**

According to an official spokesman the US Navy tested LSRS for over 2,800 hours before pressing the sensor into action in 2005. This must have been the aforementioned VPU-1 operation in July 2005.

The first time LSRS equipped Orions were seen near a warzone was late November through early December 2006, when six Orions were seen at an undisclosed location in the Middle East. The P-3's carried the same canoe pods as seen at Davis Monthan earlier on August 15th, 2006. Not more than three LSRS pods were ever noted at the same moment during the observations. Firstly on P-3C BMUP+ BuNos 161587, 161589 and 161415 and when the rotation had taken place, they appeared on P-3C BMUP+ BuNos 161414, 161339 and 161589.

The airbase concerned was most likely Al Udeid AB in Qatar, where VP-46 was deployed since June 2006 until it was replaced by VP-8 late November. On December 4th, 2006 VP-46 issued a press release about their return home to NAS Whidbey Island, Wa. This press release mentioned the following:

“The squadron was the first to begin using the complex Littoral Surveillance Radar System (LSRS) pod in both 5th and 7th Fleet theatres

of operation.“

The following units (with known P-3 serials) have subsequently been deployed to Al Udeid AB in Qatar since 2006:

un06	-Nov06	VP-46	161415, 161587, 161590
Dec06	- May07	VP-8	161339, 161414, 161589
Jun07	- Nov07	VP-40	161126, 161588, 161589
Dec07	- May08	VP-47/VP-26	161586, 161596
Jun08	- Nov08	VP-46	161126, 161132, 161593
Dec08	- May09	VP-8	161415, 161588
Jun09	- Nov09	VP-40	161588, 161590
Dec09	- May10	VP-1	161590, 161596
Jun10	- Nov10	VP-46	161414, 161589
Dec10	- May11	VP-8	161405, 161590

Initially as BMUP+ Orion frames and LSRS pods were limited, aircraft and LSRS pods were rotated frequently among deployed squadrons. Since 2011, with twelve pods available to equip sixteen aircraft, there will be less inter-squadron transfers.

From the observations above it can be concluded that not all VP-squadrons are operating the BMUP+ version.

After some occasional visits to NAF Kadena in Japan on June 26th, 2006 by BuNo 161590 and in 2008 and 2009 by BuNo 161126, Orions with LSRS pods have also been permanently deployed to NAF Kadena since June 2009. This became possible after the extra number of LSRS pods became available, since these were ordered in 2008.

The following list gives the TDY squadron present at Kadena, since June 2009. However, there is a strong suspicion that some, if not all, BMUP+ aircraft were not operated by these squadrons:

Jun09	- Nov09	VP-45	161121, 161339/LN
Dec09	- May10	VP-47	161339
Jun10	- Nov10	VP-9	161586 (ex LC code still visible)
Dec10	- May11	VP-4	161404, 161586 (both received VP-4 markings in Jan. 2011)

US Navy Orion flying to or from the deployment sites in the Middle East normally make a fuel stop at either NS Rota in Spain or NAS Sigonella in Italy before or after crossing the Atlantic Ocean. However when the LSRS pod is carried the extra weight makes an extra stop necessary. During the first years of LSRS operations RAF Mildenhall was often used for this extra stop, but with the closure of NAS

Brunswick, Me, it changed to Lajes AB on the Azores.

#### **BMUP+ visits to Mildenhall, UK**

29oct06	w	161586	callsign Lancer22 (unmarked, but with AAR-47 MWR)
14feb07	w	161126	callsign Marlin68
26feb07		(161415)	callsign Marlin68 (night-time visit, serial from flight plan)
27mar07		161405	callsign Tiger07
14apr07	e	161132	callsign LK26
19apr07	w	161126	callsign LK261
30apr07	w	161404	callsign YB404
30apr07		161339	callsign LK26

09may07 w	161414	callsign LK44 (no NAVY titles)
03aug07	161588	callsign YB588
10aug07	161593	callsign YB593
25aug07	161596	callsign LK01
31aug07	161404	callsign LK01
05nov07	161596	callsign Tiger 32
28nov07	161339	callsign LK08
29nov07	.....	callsign LK10
07may08	161132	callsign MN806
07may08	161588	callsign MN807
16sep08	161593	callsign Tiger 28
27may09	161588	callsign Lancer 33
01jul09 1	61586	callsign LK22

**BMUP+ visits to Lajes, Azores**

30nov07 w	161588	callsign Marlin 31
06dec07 w	161126	callsign Marlin 09
06dec07 w	161405	callsign Marlin 00
08dec07 w	161132	callsign Marlin 40
08dec07 w	161596	callsign Marlin 68 (no LSRS pod)
01dec09 e	161596	callsign YB596
08dec09 w	161588	callsign MN802
20dec09 w	161590	callsign RC590
03jan10 w	161405	callsign RC405
24feb10 w	161404	callsign Tiger01 (diverted to Rota)
24feb10 w	161329	callsign Tiger79 (BMUP/no LSRS pod)
23may10 e	161414	callsign RC414
24may10 w	161589	callsign RC589
26may10 w	161590	callsign YB590
05jun10 w	161596	callsign YB596
24nov10 e	161404	callsign Tiger03
27nov10 e	161590	callsign Tiger06
02dec10 w	161589	callsign RC589 (no LSRS pod)
03dec10 w	161414	callsign RC414

There were no visits to Lajes during 2008 and for the most of 2009; e = eastbound / w = westbound

(YB = VP-1; Tiger = VP-8; Lancer = VP-10; LK = VP-26; Marlin = VP-40; RC = VP-46).

### Summarizing the above:

With so many facts available, but with no official confirmation, it is hard to refrain from making your own conclusions. So here is one:

The US Navy operates a fleet of 25 P-3C BMUP Orions, 16 of which are capable of carrying the LSRS pod. Although the US Navy officially denies it, it is our belief that this highly sophisticated LSRS system has been developed by a top secret Navy unit, based at Dallas Love Field, Tx.,. This unit with the funny name: Bureau of Personnel Sea Duty Component DALLAS (BUPERS SDC DALLAS) has at least 3 fully unmarked P-3 Orions assigned in September 2010. These Orions are operated by US Navy pilots for a nonmilitary organization.

Throughout the development of the LSRS system the following Orions (may) have been used:

152739	apr78	-	oct97	replaced by 158574
153414	jul91	-	sep93	temp. replacement
158574	sep97	-	present	
159887	sep97	-	nov04	replaced by 161411
160293	jan01	-	present	
161410	aug84	-	nov04	replaced by 160293
161411	dec02	-	present.	



ABOVE LEFT - It was taken at Dallas Love Field in 1978 and it is the first evidence of P-3B 152739 with a canoe shaped pod underneath the fuselage. According to an official Lockheed list this Orion was then assigned to the PMTC at NAS Point Mugu. ABOVE RIGHT - On August 15th 2006 an anonymous P-3C equipped with the canoe shaped pod and a badly damaged radar nose received world wide publicity, when it was photographed just before landing at Davis Monthan AFB (John Hyatt).

If someone has other theories or thoughts on the subject we would like to hear so (jdubbeldam@p3orion.nl)

**Jaap Dubbeldam**

**P-3 Orion Research Group**