



VP ASSOCIATION NEWSLETTER

AN ASSOCIATION OF VETERANS WHO SERVED WITH THE NAVAL AIR RESERVE PATROL SQUADRONS BASED AT NAS SQUANTUM MA, NAS SOUTH WEYMOUTH MA, AND NAS BRUNSWICK ME.

NOTE, CURRENT AND FORMER MEMBERS OF ANY U.S. NAVY PATROL SQUADRON ARE WELCOME TO JOIN US!

ISSUE 84

[HTTP://WWW.VPASSOCIATION.ORG](http://www.vpassociation.org)

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Welcome to another edition of the VP Association newsletter. Until further notice please direct all VP Association-related inquiries or correspondence to Marc Frattasio, PO Box 30, Pembroke MA 02339, 781-294-4491, marc_frattasio@yahoo.com.

RECCO:



ABOVE: P2V-5FS (SP-2E) assigned to the reserve aircraft pool at NAS South Weymouth during the summer of 1961. The fluorescent orange markings shown here were applied to all military aircraft engaged in training operations within the continental United States beginning in the late 1950s after a USAF jet nearly collided with an airliner somewhere over the mid-west. The orange markings disappeared soon after the country became actively involved in the Vietnam War since the high-visibility markings negated camouflage and complicated transferring aircraft from the U.S. to the war zone. Got something similar to share? Contact Marc Frattasio at marc_frattasio@yahoo.com.

FINAL FLIGHTS:

We recently lost Dennis Miller and Max Tucker. Both men were in VP-92. Dennis was an FCO and Max was a pilot.

ILL SHIPMATE IN NEED OF CHEERING UP:

Bill Hanigan, who was in VP-911 and VP-92, had another stroke. He was recently admitted into a convalescent home in Plymouth, MA. Unfortunately, visiting is complicated, since it requires an appointment. If you'd like to send him a card or letter, send to Bill Hanigan, Newfield House (Room B7), 19 Newfield Street, Plymouth MA 02360. Please note that Bill can't respond since he has aphasia and is unable to write or speak. However, he can read and will understand what you write.

THE ADMIN FUND:

The VP Association has no dues but contributions are welcome to help defray the cost of web site hosting, postage, and other expenses. We'd like to thank Peter Crone for his recent generous donation to the VP Association's admin fund.

SPEAKING OF THE COST OF PRINTING AND MAILING NEWSLETTERS...

If you have an e-mail address and get your newsletter in the mail please contact George Driscoll at gnddriscoll@gmail.com ASAP so we can send it to you via e-mail. Remember, we do not charge dues and operate on a shoestring thanks to volunteer labor, memorabilia sales, and donations. If you have an e-mail address and get a paper newsletter it would be better for us to send it via e-mail.

LOST CONTACT:

Be sure to inform George Driscoll at gnddriscoll@gmail.com about home or e-mail address changes.

CONGRADULATIONS TO RADM ROBERT CLARK:

Robert Clark, who served as the last executive officer of VP-92 before the squadron was disestablished in 2007, was recently nominated for promotion from rear admiral (lower half) to rear admiral (upper half). If you are as confused about this as I was before I researched it, rear admiral (lower half) was known as commodore prior to 1984 and is a one-star admiral. Rear admiral (upper half) has two stars. RADM Clark is presently serving as the deputy commander of the Seventh Fleet, which is based at Yokosuka, Japan.

HARVEY SHORE:



Harvey Shore now resides at All American Assisted Living located at 1074 West Washington Street, Hanson MA 02341. Recently one of his old friends from VP-92, Frank Collins, presented him with a coffee table book about the Navy and a framed print of a VP-92 P-3C that was painted by former AK1 Susan Zimmerman. If you'd like a framed print for yourself, contact Susan directly at birdlady650@gmail.com.

BILL HANIGAN:

Here is a recent photo of Bill and Barbara Hanigan at the Newfield House. Bill can have visitors, but visiting for now is complicated since 1) you must make an appointment, 2) you must be tested for the Wuhan Flu, 3) if you haven't been inoculated you won't be allowed into Bill's room and the staff will bring him out to a common area, 4) he can only have two visitors at a time, and 5) you can stay no more than 30 minutes. To make an appointment to visit Bill call 781-746-2999 and ask for "Claire".



A NOTE AND PHOTO FROM SEAN O'NEAL:



These are crazy times everywhere. To bring back more relaxing times check out the attached photo [presented above]. If photos could talk! This collective group spent more time on the Rota beach than in the air or on the base. Fun times. Our second son Conor is the maintenance officer now in an F-18 squadron at NAS LeMoore in California. He's gearing up for deployment in June. We are headed out there for Easter.

NAS BRUNSWICK REUNION:

The Brunswick Naval Aviation Museum will host an NAS Brunswick reunion on that old base over the weekend of September 17th, 18th, and 19th. The NASB reunion will feature a variety of events scheduled for each day, with the main event being a traditional Maine seafood banquet catered by

Cook's on Saturday evening between 5:30 and 10 PM. There will be a golf tournament at the Bath Country Club on Sunday morning. The Navy is expected to send a P-3 and P-8 up from NAS Jacksonville, and both aircraft will be open for visitors on Saturday afternoon between noon and 4 PM. The museum itself will be open on all three days. The schedule of events and an on-line reservation form are at <https://bnamuseum.org>. If you are interested in going, please check them out.

The events for which there is an admission fee are priced on an ala-carte basis. Reservations are required in advance since the organizers need to know how many people to expect at each event. It will help the organizers greatly if you make your reservations sooner rather than later! The museum has made arrangements with a professional videographer to record interviews with NAS Brunswick veterans. Interview sessions are being scheduled in 30-minute blocks throughout the weekend. If you would like to talk about your experiences at NAS Brunswick, please schedule an interview session before they fill up. You can reserve a session through the reunion event schedule web page.

We will not have a VP Association reunion this year. If you'd like to get together with your old shipmates from VP-92, the VP-MAU, or any other command associated with NAS Brunswick this year, the NAS Brunswick reunion is the place to do it. The organizers are making space available in the museum's main exhibit hall at one-hour intervals on Saturday for squadron alumni associations to conduct "mini-reunions" on Saturday. Your newsletter editor has scheduled a joint VP-MAU/VP-92 "mini-reunion" for noon to 1 PM. If you are coming to the NAS Brunswick reunion and were in the VP-MAU and/or VP-92 please come to the museum at noon on Saturday. Your newsletter editor will have specially commissioned souvenirs to hand out to former VP-MAU and VP-92 personnel at this "mini-reunion". The supply is limited, and only one set per shipmate will be handed out while they last on a first-come first-served basis.

CHINAS NEW SUBMARINE "COULD DESTROY ANY CITY IN AMERICA" (Daily Star 5/3):

Until now, most US cities had been out of the range of China's submarine-launched missiles because of the protective "first island chain" – a series of US bases dotted across the Pacific ocean that are all equipped with sophisticated submarine detection systems. But with the launch of the Type 094A, or Jin-class, nuclear-powered ballistic missile submarine on Friday (April 30) America's first line of defence is no longer relevant.

The Jin-class runs quieter than its predecessors, giving it much more chance of slipping past America's first line of defence, and can carry the JL-3, or Julang (Big Wave) nuclear missile that has a 6,200-mile range. A Chinese military source told the South China Morning Post: "The Type 094A is an upgraded version of the Type 094 that overcame one of the key problems – noise – by improving hydrokinetic and turbulent systems, allowing it to carry the more powerful JL-3." "Before the upgrade," the source added, "the submarine was armed with the inferior JL-2 that could only hit the northeast United States, but now it's able to cover the whole American continent."

Former PLA instructor Song Zhongping stressed that while China had no plan to strike the first blow in a nuclear exchange but the Julang missile's increased range meant that any US first strike would be met with devastating retaliation. "The new SLBM with MIRVs with a firing range over 10,000km (6200 miles) is the basic technical requirement for an upgraded Type 094 SSBN to cause nuclear deterrence," he said. "China promises not to use a nuke first but a powerful SSBN fleet will help the PLA strengthen their second-strike power against rivals."

The Type 094A is one of the three new warships unveiled last week to mark the 72nd anniversary of China's PLA Navy. The others were a new guided missile cruiser, the Type 055 Renhai-class, and the Type 075 amphibious helicopter assault ship. Tensions between China and the US continue to ratchet up in the South China Sea, mainly over the independence of Taiwan. The independent state

is the first link in America's First Island Chain but for the Chinese government it's an important piece of territory that it's eager to reclaim.

Daily Star article by Michael Moran

PERSONAL DIVERSION LANDS AIR FORCE PILOT IN HOT WATER (AVWeb 5/2):

A Royal Canadian Air Force (RCAF) pilot checked in on time for his flight but will carry a stain on his record for the expense and disruption it caused. Capt. Nathaniel D'Arcy was commanding a CP-140 Aurora, the RCAF equivalent of the U.S. Navy P-3 Orion, in a training exercise off the west coast of Canada in May of 2019 when he remembered he'd forgotten to check in for an airline flight booked for the next day. He broke off the mission in search of a cell signal, flying the thirsty four-engine aircraft and its 12-person crew 25 minutes to the resort town of Tofino, British Columbia, where he got the bars he needed. While the plane orbited the town for seven minutes, D'Arcy completed his check-in.

The hour-long diversion annoyed his crew because they had to do a lot of extra work to get set up for the resumption of the exercise. Some of them let D'Arcy's superiors know and the brass, in turn, were not amused. Neither was the judge at his court martial. "He eroded the respect and trust of leadership in his whole crew," Judge Cmdr. Matin Pelletier said in his judgment "Any crew under his leadership would have been ineffective." D'Arcy pleaded guilty to a single charge of "conduct to the prejudice of good order and discipline." The charge carries a maximum penalty of two years in a military prison and dismissal but the judge settled on an official reprimand, which will dog the officer throughout his career. The judge took the pilot's good performance and his time spent flying an Aurora over Syria and Iraq as part of Operation Impact into account in sentencing.

AVWeb article by Russ Niles

FLYING AND FIGHTING IN THE SOVIET TU-142 BEAR (Hush-Kit 5/2):

Created at the height of the USSR's global power, the Tupolev Tu-142 is a maritime patrol aircraft developed from the Tu-95 'Bear' strategic bomber. With around 60,000 horsepower – the fastest, largest, loudest turboprop aircraft in the world thundered across the seas surrounding India for 29 years. Protecting the subcontinent this long-ranged beast earned the respect of its crews and the appropriate nickname of 'Albatross'. We spoke to those who flew the Albatross with the Indian Naval Air Arm to find out more.

Commander VC Pandey (Veteran) NM, VSM

Prior to the Tu-142, I was flying the Ilyushin Il-38. I was trained on the Il-38 in Riga in 1976, I flew this aircraft until 1985 in India and gained a great deal of experience. I was an Instructor and Examiner of Pilots on this aircraft. I was trained in the same centre at Riga to fly and command the Tu-142 in October 1987. Having vast experience of flying the Il-38 was very helpful in flying Tu's thanks to the similar instrument concept. For example, the Artificial Horizon indicators of both these aircrafts are opposite to those of non-Russian type of aircraft!

To start the main engines, there is a turbo generator on board (similar to an APU) which is started up with the supply from a ground unit. Each engine has an inbuilt mini engine which is started first. Normally, the Flight Engineer starts the engines. The power levers can also be handled by the Flight Engineer in the cockpit.

The visibility from the cockpit is very good. We have done a few close formation flights for air shows. The Short Range Navigation System (RSBN) is very similar to a VHF omnidirectional range (VOR) with distance measuring equipment (DME) and was available on board. However, it was

incompatible beyond Russian territories. There was no GPS, INS, FMS, TCAS etc. on board the aircraft, yet it was able to fly around the world and navigate very accurately. The responsibility of navigation was the duty of the Flight Navigator, whose work station was ahead of the Captain's seat in the nose area. He was required to power the 'Stars Navigation System' a couple of hours before the starting of the main engines.

The Star Navigation System known as MAIS in Russian was the main navigation system on board. The almanac of various stars around the globe was available in the computer of this system. After inserting our own position, the system locks on to stars available in the Zenith. The altitude and declination from a couple of stars would give a position accurate to a few metres. Thereafter during the flight, the system would automatically compute its own position.

The 'Data Link System' was displayed in the centre on the dashboard in the cockpit and with an electronic screen displaying the deployment of various sensors and some virtual images. This data was could be shared with another airborne or shore station for assessment and information of the current situation for decision making.

What should I have asked you?

Why Russians built the Tu-142 aircraft and from where did they deploy them? The US Navy developed the UGM-27 Polaris, a submarine-launched ballistic missile with a range of more than 1800 kilometres. Polaris became operational on 15 November 1960. The Soviet government consequently ordered Tupolev to study possible dedicated anti-submarine warfare aircraft. Initially they built Tu-95s and later various versions of the same platform modified for different roles, designated Tu-142M. I flew the Tu-142MK-E version. Nuclear submarines need not surface for many months, so Tu's were positioned in Cuba, Murmansk and Vietnam and were able to track US nuclear submarines around the globe in real-time and transmit their position by data-link system to their operational bases.

The thing I liked best about the Tu was its speed, ceiling, low-frequency analysis and underwater recording sensors and their armaments for the destruction of underwater targets. It had a unique concept of flight controls. It had a fly-by-computer system. Control columns and rudder pedals in the cockpit were connected by push pull rods to a computer, output of which would deflect the elevators, ailerons and rudders taking into consideration various flight conditions. The movement indications of these surface areas was available in the cockpit.

Air-to-air refuelling system?

The fuel capacity of this aircraft was about 100 tonnes. This fuel could normally give about 16 hours of flight. This aircraft was operated by a single crew, therefore provision of this airborne refuelling system was a tactical decision by the Russians. Flexibility to takeoff from a short runway, fuel/ time availability was the deciding factor for this system.

Worst thing about the Tu-142?

I think the philosophy of Russian aircraft designers in those days was to fill the aircraft with equipment first and only thereafter consider anything else. A rest-room (and even toilet) in the aircraft was not considered necessary. Every operator seat had a portable water bottle for collection of personal urine during the flight. The aircraft did not have any dry or wet rest-room for defecation. The crew member had to leave his seat, go to a corner and discharge urine in that bottle. The aircraft did not

have any designated rest area. There was no provision for making tea or coffee in the aircraft, not even a microwave oven to warm up the food. It was very tough and all crew members were male.

Training and ferry flight to India, our aircraft training commenced in the month of October. The temperature had already dropped below freezing in Riga. In the month of December, the temperature was hovering around minus 20 to minus 30 degrees C. Icing was never a problem for this aircraft. In the month of December, every thing in Riga is covered with snow, all is white, including runways. Every landing was radar vectored Cat -1 ILS Approach, nothing visual till approx 500 feet or so. Thereafter, all that one could see was a small strip of black land mass. After landing and clearing the active runway, the runway disappears due to heavy snowfall. My training on the Tu was done under such extreme, difficult, conditions.

Most memorable flight?

The maiden flight to India, Russians permitted all Indian crew to ferry fly this aircraft from Russia to India. They did all the planning. It was decided that the aircraft would depart from Simferopol, Ukraine, to Goa in India and it would be a non-stop direct flight. The route chosen was overflying Ankara – Larnaca -Cairo – Jeddah – Aden – Mumbai then land in Goa. Russian Air Traffic Controllers cleared the flight to fly at around 36,000 feet and at 0.76 the speed of sound. The moment we contacted Saudi Controllers they requested for Radial and DME from a particular position. We replied that VOR DME is not available on board. The controller became very furious and asked us to immediately descend to around 15000 feet. We had no choice but to comply, we had fully tanked up so fuel was no problem.

The Aden Controller was very nice and friendly. He cleared us to climb back to 36,000 feet and to fly direct to Mumbai. We climbed to the designated height, auto pilot 'ON'. After reaching the level, we handed over the stick of the Auto Pilot controller to my Copilot. Yes, there was a long extendable stick with control buttons for manoeuvring the aircraft and it could be swung between the pilots. We were in an 'I'm home' mood – but it did not last long. American naval fighters came from nowhere and started forming and taking pictures of every inch of our aircraft. These aircraft would be with us for about 15-20 minutes, do a vertical Charlie and disappear. Soon another fighter would arrive to accompany us into the Arabian Sea. I had noticed that these American fighters were fully armed. In the aft section of the Tu-142 there is a gun with twin barrels and a gunner crew. The flight gunner reported that 'The fighter is very close to me and almost touching our aircraft'. I told him not to provoke him and keep cool, soon they will go away. It happened so, at exactly 150 miles from Mumbai. The fighter departed and did not return to keep us company. Anyway, we were in contact with Mumbai controllers. Note – This aircraft is now in a museum in Vishakhapatnam in India, which is open to public.

Vinod Bhasin

Which types did you fly before and after the Tu-142?

I did my basic training on a single engine tail wheel Indian aircraft known as the Pushpak before moving onto the piston engine Britton Norman Islander. I then got selected for the Tu-142M, or 'Bear-F'. After leaving the Navy I flew the Super King Air B200 turboprop for five years before graduating on to the bombardier BD700 Globals. Initially I flew the classic BD700 with the Honeywell avionics suite and then the BD700 vision with the Rockwell Collins suite.

How did it differ from the type you were flying before?

The Tu's were poles apart from the Islanders which is what I was flying earlier. From a 3-ton piston engine to a 185-ton aircraft – the heaviest and the fastest turboprop in the world – was a humongous change.

First impressions?

We were shocked and awed. Got goose bumps, literally, at first sight.

How would you rate the cockpit for the following?

Ergonomics: Once we got acquainted we were quite comfortable. It was an entirely novel experience in the beginning because most of the stuff was done by others. The throttles were manipulated by the Flight Engineer who was actually facing aft, his seat located behind the copilot. Both the pilots of course had their own throttles and could override the Flight Engineer. Navigation was done by the flight navigator who was seated in the nose of the aircraft at a lower deck. The Flight Signaller, again facing aft, behind the pilot in command did all the long distance communications. The check list was done by the flight gunner with challenge and response. He was seated at the tail, facing aft, and with no access to the rest of the aircraft. He was indeed a lonely fella and was happy reading the checklist! So you see almost everything was provided on a platter to the pilots.

Pilot's view: Reasonably good

Comfort: The seats were quite comfortable I thought but other than that not much thought was given to crew comfort. Answering to the calls of nature by a crew of nine in the front crew area in one toilet over long flights was a big challenge

Instrumentation: Very compact for the pilots. As stated above many tasks were done by other crew.

What is the best thing about the Tu-142?

The fastest and the heaviest turbo prop in the world. We would cruise at 0.8 m during transit. Powerful engines each producing 15000 shp. The contra-rotating propellers were fascinating.

....and the worst?

Noise...and fuel consumption.

How would you rate the Tu-142 in the following areas?

Take-off: Good except that it required long runways for take off because of its weight.

Landing: She handles pretty well during landing and the engine response is pretty good despite throttles being manipulated by the Flight Engineer on command of the Pilot Flying (PF). The last time I flew these was in 2002, but the sequence of throttle orders coming in for landing will stick in my memory always. Outers to flight idle as we flare, inners to flight idle short of touch down, inners zero, unlock all and then outers zero!

Combat effectiveness: Pretty effective overall. Avionics and equipment were archaic to begin with, but upgrades happened with the passage of time and this aircraft succeeded in keeping the enemy

submarines down. The Western World were always intrigued and somewhat wary of this platform and the world perception of the Indian Navy in general changed once we acquired these planes.

Acceleration: Great

Top speed: Normal cruise was 0.8 and not to exceed 0.82

Reliability: Spares was an issue from time to time but the dispatch reliability was well managed.

Weapons: Effective

Climb rate: Good for its weight

Range: Enviably, almost unmatched

Sensors: Effective with retro fitment as time went by.

What's the biggest myth about the Tu-142?

Perhaps, that it is an overrated machine.

What should I have asked you?

How do the crew feel after taking off at 8pm and landing at about 9am the next morning after flying 400 metres over the sea for most part in a pitch dark night with the auto pilot unserviceable?

Describe your most memorable flight in a Tu-142

There were a few exciting ones including a test flight wherein an engine would not unfeather after intentional shutdown and the subsequent three engine landing. But the most memorable for me was a ferry flight from Cairo to Taganrog (sometime in 1996/97) wherein the destination was changed from Simferopol to Taganrog at the last minute due to some technical reason. Communication with the ATC controller was a big challenge since he couldn't speak English. An Indian embassy official who had come to receive us was hurriedly summoned to the ATC to resolve the confusion.

Describe a typical mission

Take off, high level transit to operations/exercise area, descent to lower altitude, dropping of sonobuoys for detection, location and tracking of submarines, climb to transit altitude and return to base

How comfortable was a mission – how loud was it in the cockpit?

Long missions by night were tiring. Noise levels were high.

What was life like between missions?

Life between missions depended on the level of your responsibility. Adequate rest and recreation for the youngsters and back to the desk for those holding appointments.

Tell me something I don't know about the Tu-142

Proper parachute deployment of any sonobuoy/weapon drop was confirmed initially by physical sighting by the Flight Gunner who was seated at the tail facing aft. When we flew these planes from Simferopol to Goa for the first time we did not have GPS or even VOR on board and hence navigation was a challenge. In case the undercarriage did not go down, the emergency lowering was initiated by the Sonic Operator.

Describe the Tu-142 in three words

The mighty props

What was its role in Indian service? What would the aircraft have done in a full scale war?

Can we avoid this question?

How did you feel when it was retired?

Sad. Couldn't hold back the tears. I was part of the commissioning crew, was trained in the erstwhile USSR by the Russians as a copilot, went on to train other pilots and ultimately commanded the squadron.

What is your favourite memory of the type?

The Russian instructor pilot standing in between two of us Indian pilots and instructing us to come in for landing in Russian language with the help of an interpreter.

Does it have a nickname in Indian service?

The Albatross

Do you miss it?

Immensely.

Was there anything unusual about flying it?

A couple of unusual things amongst others, were the Flight Engineer facing aft and throttle orders without getting to look out and the flight gunner stuck at the tail of the plane all by himself at his crew stations

What was the greatest potential military threat to the aircraft?

Carrierborne fighter aircraft.

Cmde MR Ajaykumar NM VSM (Retd)

I was an Observer in Tu-142, therefore I will be answering from an Observer's perspective!

With which unit did you serve?

I served in multiple units, commanded the air squadron, Naval Air station handling multiple air squadrons, I commanded multiple ships including being captain of a missile frigate.

Which types did you fly before and after the Tu-142?

I flew the Il-38 before the Tu.

When did you start on the Tu-142?

I went to erstwhile USSR, Riga, for the aircraft induction training in 1987!

How did it differ from the type you were flying before?

Both being Russian long-range maritime patrol aircraft, not much difference in terms of cockpit. However, the Tu had more advanced systems!

First impressions?

Impressive and menacing looks!

How would you rate the cockpit for the following:

Ergonomics: Average

Pilot's view: Comfortable

Comfort: *Russians never cater for crew comfort. First, they install the systems and then check where to fit the man behind the machine! Flying at times more than ten hours on missions, were a test of human endurance sitting in an uncomfortable seat. The aircraft did not have a proper toilet also! But we felt proud to fly the highest and fastest flying turbo prop in the world!*

Instrumentation: *Not the modern type. More of a second world war look!*

What is the best thing about the Tu-142?

It is rough and tough! Very forgiving and lots of importance to the man behind the systems!

...and the worst?

The crew comfort

How would you rate the Tu-142 in the following areas:

Take-off: *For full weight take-off cannot be done from average runways. Very long take off run.*

Landing: *Long landing run and very high Load Classification Number runway required.*

Combat effectiveness: *Very effective, despite being from older technology.*

Top speed: *Fastest turbo prop, 0.82 mach!*

Reliability: *Very reliable.*

Weapons: *It had bombs, torpedoes, depth charges and a tail gun. It was later was modified to carry air-to-surface Harpoon missiles.*

Range: 12,550 Km

Sensors: *Radar, Magnetic Anomaly Detector, Air early warning radar for tail gun, ESM, Sonobuoys, radar transmission warner.*

What's the biggest myth about the Tu-142?

No one really knew about the actual capability of the Tu. It was a well-kept secret! When we had a joint exercise with the US Navy, P-3C Orion, they offered us a million USD to have a peep inside the aircraft! So you can imagine the myth!

Describe your most memorable flight in a Tu-142

The first flight, from Simferopol in the USSR to India, routing via, Ankara, Cypress, Cairo, Djibouti, and Goa in India! Almost 13hrs nonstop flight... In the midst of Iran-Iraq war in full swing. Occasionally the US Navy's F-14 Tomcats flying with us in formation!

Describe a typical mission

Mostly anti-submarine missions. Drop sonobuoys in the area and locate and track the submarine. Otherwise typical maritime missions.

How comfortable was a mission – how loud was it in the cockpit?

Crew comfort was not really good. The cockpit was a bit loud.

What was life like between missions?

There used to be adequate breaks between routine missions. It was generally compressed only during major exercises or operational missions. But generally ensured a 24-hour break after a 10-hour mission.

Tell me something I don't know about the Tu-142

A Tu has been converted into a walk-in museum in the Port city of Visakhapatnam in India. So, there is no more secrets!

Describe the Tu-142 in three words

The Mighty Props!

What was its role in Indian service? What would the aircraft have done in a full scale war?

It was extensively used in maritime reconnaissance and anti-submarine warfare missions. Also, the ESM was put to good use in electronic snooping.

How did you feel when it was retired?

I felt really sad to see the aircraft being retired, which I saw from commissioning and was the Commanding officer of the squadron!

What is your favourite memory of the type?

Lots. Many operational and camaraderie memories. It never failed us!

Did it have a nickname in Indian service?

The Albatross!

Do you miss it?

Yes!

Was there anything unusual about the aircraft or flying it?

The mission commenced almost two hours before the take-off, because the Inertial Navigation System took about 90 minutes to settle down! So, we had to man the aircraft 90 minutes before takeoff!

What was the greatest potential military threat to the aircraft?

Long range SAMs and fighter aircraft!

Jasbir Singh, Commander

Before the Tu-142 I flew the HT2, Harvard, Vampires, HJT-16, Alize, Illusion-38 and Tu 142. After Tu-142 I flew the Airbus 310, B747 and B7771A. The Tu-142 was a very heavy aircraft to fly and the first power control aircraft to fly. It was a very impressive aircraft with good anti submarine warfare equipment.

How would you rate the cockpit for the following:

Ergonomics: *Good. Auto pilot could be controlled by both the pilots in the comfort of their seats.*

Pilot's view: *Good. Comfort Moderate. Instrumentation Moderate. No VOR, DME good only in Russian airspace.*

Best thing: *Very sleek and high speed turbo prop aircraft with long range.*

Worst thing: *No proper toilet facilities. A bucket was kept with a curtain around.*

How would you rate the Tu-142 in the following areas:

Take-off: *6 out of 10*

Landing: *7 out of 10*

Combat effectiveness: *8 out of 10*

Acceleration: *5 out of 10*

Top speed: *925 Km/h*

Reliability: *Good*

Weapons: *Torpedoes and depth bombs*

Climb rate: *Poor*

Range: *12500 Km*

Sensors: *Good 7 out of 10*

It was a myth was that Tu-142M is a deadly platform, which was not the case because of poor navigation equipment. However, the Indian Navy made upgrades and improved the performance.

Most memorable mission?

An Islander aircraft crashed near Visakhapatnam. We took off from Goa and the weather en route and in the search area was very bad. It was a night operation. We completed the mission with CBs (cumulonimbus) all around us. It was the most tense flight we had.

Noise level in the cockpit was moderate.

What was life like between missions?

Great

Describe the Tu-142 in three words

Big, fast, good.

What was its role?

In Indian service it performed the role of maritime and anti-submarine warfare.

How did you feel on its retirement?

Emotional when it came in after its last flight in a grand function which I attended.

Do you miss it?

Not really

What was the greatest potential military threat to the aircraft?

Ships anti-aircraft guns, anti aircraft missiles etc.

INDIA APPROVED TO BUY SIX MORE P-8Is FOR \$2.42BN (FlightGlobal 4/30):

US State Department has approved the possible Foreign Military Sale of six P-8I maritime patrol aircraft to India for an estimated cost of \$2.42 billion. The Defense Security Cooperation Agency says it delivered the required certification to the US Congress on 30 April. As part of the proposed sale, India would also buy a number of subsystems, some seemingly intended for previously ordered examples of the P-8I. The Indian Navy bought eight P-8I aircraft in 2009, and contracted for four more aircraft in 2016.

The systems requested as part of the package include eight multifunctional information distribution system-joint tactical radio systems, 42 AN/AAR-54 missile warning sensors, 14 LN-251 advanced airborne embedded global positioning systems /inertial navigations systems, the P-8I variant of the Tactical Open Mission Software, an electro-optical and infrared MX-20HD camera, an AN/AAQ-2(V) acoustic system, ARES-1000 commercial variant electronic support measures, an AN/APR-39D radar warning receiver and an AN/ALE-47 counter measures dispensing system.

“This proposed sale will support the foreign policy and national security of the United States by helping to strengthen the U.S.-Indian strategic relationship and to improve the security of a major defensive partner, which continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia region,” says the Defense Security Cooperation Agency in an online notice. The \$2.42 billion estimated cost is on the highest end of what Delhi would pay, as

Foreign Military Sales approvals account for a range of equipment options which are not ultimately included in the final purchase agreement.

The sale of the additional P-8Is to India is also not certain, as the country's government may not give final authorisation. However, if the sale did go through, India would have 18 examples of the maritime patrol aircraft and become the 737NG-based jet's second largest operator behind the US Navy (USN). The USN has 109 examples of its P-8A Poseidon in service, with another 18 on order, according to Cirium fleets data.

The P-8 is designed to conduct long-range anti-submarine warfare, anti-surface warfare, and intelligence, surveillance and reconnaissance missions. It has a bomb bay that can drop sonobuoys and torpedoes, as well as hard points on its wings for anti-ship missiles. The Indian navy has also used the aircraft to conduct search and rescue missions, including dropping a survival kit and inflatable life raft from the jet. India's position between the Arabian Sea, Indian Ocean and Bay of Bengal makes it a strategically important player in tracking the movements of submarines and ships, in particular those of China. The country also sits alongside vital shipping lanes between the Middle East and East Asia.

Though not a treaty ally of the USA, India is a partner of increasing importance due to its population of 1.4 billion people and its fast-growing economy. It is also part of the Quadrilateral Security Dialogue, known popularly as "the Quad", an informal group of four nations that includes Australia, Japan and the USA, which periodically hold diplomatic talks. In addition to the Indian Navy and the USN, the P-8 is operated by the Royal Australian Air Force and the UK's Royal Air Force. The Royal New Zealand Air Force, Royal Norwegian Air Force and South Korean navy have also selected the P-8A as their next maritime patrol aircraft.

FlightGlobal article by Garrett Reim

MISSING INDONESIAN SUBMARINE FOUND BROKEN INTO THREE PARTS (ABC News 4/25):

A missing Indonesian submarine has been found, broken into at least three parts, deep in the Bali Sea, army and navy officials said on Sunday, as the president sent condolences to relatives of the 53 crew. Rescuers found new objects, including a life vest, that they believe belong to those aboard the 44-year old KRI Nanggala-402, which lost contact on Wednesday as it prepared to conduct a torpedo drill. "Based on the evidence, it can be stated that the KRI Nanggala has sunk and all of its crew have died," military chief Marshal Hadi Tjahjanto told reporters.

Navy chief of staff Yudo Margono said the crew were not to blame for the accident. "The KRI Nanggala is divided into three parts, the hull of the ship, the stern of the ship, and the main parts are all separated, with the main part found cracked," he said. President Joko Widodo earlier confirmed the discovery in the Bali Sea and sent the families of the victims his condolences. "All of us Indonesians express our deep sorrow over this tragedy, especially to the families of the crew."

Search teams said on Saturday they had found objects including prayer mat fragments and a bottle of periscope lubricant near the submarine's last known location, leading the navy to believe the vessel had cracked. Margono said on Saturday that a sonar scan had detected a submarine-like object at 2,800 feet, beyond the Nanggala's diving range. More than a dozen helicopters and ships are searching the area where contact was lost, with the United States, Australia, Singapore, Malaysia, and India providing assistance.

Residents of the East Java town of Banyuwangi, which hosts the naval base from where search and rescue operations are being conducted, joined nationwide calls to accelerate the modernisation of

Indonesia's defence forces. "This can be a learning point for the government to advance its military technology and be careful in how it uses its (existing) technology because its people's lives are at stake," said 29-year old resident Hein Ferdy Sentoso.

Southeast Asia's most-populous country has sought to revamp its military capability, yet some equipment is still old and there have been fatal accidents in recent years. Indonesia had five submarines before the latest accident: two German-built Type 209s, including Nanggala and three newer South Korean vessels.

ABC News story by Reuters

CHINESE BASE IN AFRICA SET TO SUPPORT AIRCRAFT CARRIERS (USNI News 4/20):

A recently completed pier at the Chinese naval base near the entrance to the Red Sea is large enough to support an aircraft carrier, the top U.S. commander for Africa told lawmakers on Tuesday. Referring to the Chinese naval base in Djibouti, U.S. Africa Commander Army Gen. Stephen Townsend told the House Armed Services Committee that the People's Liberation Army was expanding its existing naval installation adjacent to a Chinese-owned commercial deep-water port and also seeking other military basing options elsewhere on the continent. "Their first overseas military base, their only one, is in Africa, and they have just expanded that by adding a significant pier that can even support their aircraft carriers in the future. Around the continent they are looking for other basing opportunities," Townsend told the HASC.

The base, formally opened in 2017, was developed to support the Chinese anti-piracy mission off the coast of Somalia in the Gulf of Aden but has expanded to include capabilities to serve as a logistical resupply hub for the PLAN's blue-water capital ships like its new large deck Type-075 amphibious warship or domestically-designed Type 002 aircraft carrier, according to analysts. As recently as October, commercial satellites showed construction on a pier system at the military base at Djibouti. "The base was opened in 2017 but the piers are still under construction. China has planned to have nine piers at this base with four dedicated to PLA Navy," reported India Today. "The pier whose construction began in 2018 has now been completed with rails for heavy duty cranes on both sides."

A May report from USNI News contributor H I Sutton said the new 1,120-foot pier was "just long enough to accommodate China's new aircraft carriers, assault carriers or other large warships. It could easily accommodate four of China's nuclear-powered attack submarines if required." The base is near the Bab el Mandeb, the entrance to the Red Sea from the Gulf of Aden and a major chokepoint for maritime traffic traveling toward the Suez Canal and the Mediterranean Sea.

The U.S. and French also have installations in the vicinity of the Chinese base. The U.S. Camp Lemonnier is an easy drive from the expanding Chinese base, and troops have complained of harassment from the Chinese, including lasers directed at U.S. aircraft. Townsend told the committee the Chinese were looking at other places across Africa with the "intent to establish naval bases and air bases." While the base in Djibouti is one the most obvious sign of Chinese expansion on the continent, Townsend said that Beijing was growing its presence in Africa through civilian channels. "China is of great concern. They are literally everywhere on the continent. They are placing a lot of bets down. They are spending a lot of money," he said. "They built a lot of critical infrastructure."

USNI News article by Sam LaGrone

NZDF DEPLOYING P-3 IN SUPPORT OF NORTH KOREA SANCTIONS (Defense Brief 4/20):

The New Zealand government announced on April 20 it will deploy a Royal New Zealand Air Force P-3K2 Orion maritime patrol aircraft in support of United Nations Security Council (UNSC) sanctions

on North Korea. The Resolutions, adopted unanimously by the UNSC between 2006 and 2017, are intended to persuade North Korea to denuclearise and abandon its ballistic missile capabilities.

“New Zealand’s Orion deployments contribute to the international community’s collective efforts to achieve the full implementation of Security Council resolutions, with the goal of complete, verifiable, and irreversible denuclearisation of North Korea,” Nanaia Mahuta said. “New Zealand has long supported the maintenance of peace and security on the Korean Peninsula. Our Orion deployments help to detect and deter illicit maritime practices in contravention of UNSC sanctions against North Korea, such as ship-to-ship transfers of sanctioned cargo at sea,” Peeni Henare said.

This will be the fourth such Orion deployment, following previous deployments in October 2020, October 2019 and September 2018. Consistent with prior deployments, the RNZAF aircraft will be based at Kadena Air Base, Japan. Its maritime surveillance patrol flights will be over international waters in North Asia and will take place in April and May.

The NZDF personnel deploying will undertake all COVID-19 quarantine requirements upon arrival in Japan, and again upon return to New Zealand. “New Zealand’s latest Orion deployment reflects the Government’s commitment to collective security in the Indo-Pacific region,” defense minister Peeni Henare said.

Defense Brief editorial

RUSSIA IS WORKING ON ANTI-SUBMARINE WARFARE DRONES (Naval Post 4/5):

The Russian Ministry of Defense has been working on developing a special unmanned aerial vehicle (UAV) and a control system for it for anti-submarine purposes, Russian newspaper Izvestia shared. There is no detail if a new drone is under development or current drones would be adapted for the ASW role. It is planned that such drones will operate in a “swarm” using artificial intelligence elements. According to Russian experts, drones with high payload capability, such as C-70 Okhotnik, would suit the project.

Surface assets bear a high risk during anti-submarine warfare operations. Because they enter the torpedo danger zone while searching for the submarine, it’s a challenging process to seek and destroy a sub because the sound waves sending from hull-mounted sonars cannot go beyond the layer-depth where submarines generally hide. Therefore, operating air assets such as ASW helicopters and Maritime Patrol Aircraft are considered the best practices to cope with the submarine threat. Air assets can break the layer-depth by using sonobuoys or dipping sonars, and submarines cannot engage these assets with torpedoes and UGMs.

Of course, there are some limitations for the air assets during operations. They have a limited mission period due to the refueling needs and the boundaries of the pilots. Unmanned Aerial Vehicles will remedy these issues because new generation UAV/UCAVs can fly more than 24 hours without interruption. Establishing a 24-hour air patrol in the submarine area will cause serious trouble for a sub. Besides, if the submarine is diesel-electric, it will be hard for her to make snorkeling to charge the batteries.

To conduct ASW missions, the Russian Ministry of Defense has been preparing a new concept. They plan to use heavy drones equipped with submarine detection equipment and anti-submarine weapons. These UAV/UCAVs would operate in the same network simultaneously and hold ASW ops in cooperation.

These drones would be launched from ground airfields or ships. They plan to control them both from naval and air command posts, with the active use of automation capabilities and elements of artificial intelligence. UAV/UCAVs will either independently hit targets or direct them to anti-submarine weapons strikes from other carriers. The Russian Navy already has a large number of drones in its composition. In service are UAV “Forpost”, which weigh about half a ton, and light “Orlan-10”. Naval vehicles were actively used in the Russian operation in Syria.

An anti-submarine drone must have a large flight radius and the ability to stay in the air for a long time. It needs to be able to launch sonobuoys and receive signals from them, and then either process them itself or send the results to a specialized aircraft or ground C2 center. Such a UAV should carry at least one anti-submarine torpedo. “Hunter” and “Altius” drones are considered the promising ones to bear this mission. Their dimensions and carrying capacity make it possible to place the necessary equipment and weapons on the suspension.

Naval Post article by Dorian Archus

US APPROVES GERMAN P-8A BUY (Defense Brief 3/13):

The US State Department has approved Germany’s potential purchase of the Boeing-built P-8A Poseidon maritime patrol aircraft as the country is looking at options for replacing its P-3C Orion fleet. In an announcement on March 12, the US Defense Security Cooperation Agency said Germany had requested a total of five airframes and associated support for an estimated \$1.77 billion.

Germany’s request to purchase the Poseidon comes after the country’s defense ministry decided last year to walk away from an elaborate upgrade of the Orion fleet that would have allowed the maritime patrol aircraft to fly well into the 2030s. According to current plans, the Orion will be phased out in 2024 or 2025 as it is becoming increasingly difficult to operate and maintain. Earlier this year, Germany was left with no maritime patrol capability as the last operational P-3C broke down.

The potential purchase of the Poseidon MPA would be an interim solution as Germany and France have already started work on the Maritime Airborne Weapons System (MAWS) project that will develop a new maritime patrol solution. MAWS would replace German P-3Cs and French Atlantique 2, or ATL2 aircraft that were built in the 1980s. The two countries hope to be able to build first aircraft under the program by 2035 with the help of Airbus and Dassault Aviation. In addition to the Poseidon as the potential interim solution, reports say Germany could look into purchasing the “Persuader” MPA variant of the Airbus C-295 or the ATR-72.

The purchase of a new MPA capability could present a problem for the French-German MAWS program. As noted by DSCA, the Poseidon would provide the country with a maritime patrol capability for the next 30 years and could lead Germany to back out of the program. It should be noted, however, that a request for the purchase of an interim successor has been submitted to the German government, but is yet to be approved and receive funding.

Defense Brief editorial

NEW DETAILS OF RUSSIAN BELOGOROD “DOOMSDAY” SUB REVEALED (USNI News 2/25):

Russia’s latest super-sized submarine, Belgorod, has been a conundrum for interested observers. While its existence is far from secret, Moscow has gone to great pains to keep certain key details out of the public domain. While navies traditionally hide the screw, or propeller, from the cameras, in Belgorod’s case the reverse was true: the screws were on display at the 2019 launch ceremony, but no photographs of the forward section were ever published.

Belgorod's secret is its arrangement of the primary weapon system: a new class of nuclear-tipped torpedos. Russian state media Izvestia reported on Feb. 11 that Belgorod is being prepared for tests with the new weapon called Poseidon, a massive nuclear torpedo which is shot forward out of the front of the submarine. The Izvestia article's timing matches fresh satellite imagery of the submarine in the northern Russian submarine base in Severodvinsk, which may show part of the tests.

In the absence of official photographs, commercial satellite imagery has become a primary source of information. Though the long Arctic nights and thick clouds have limited access to new imagery for many months, now as the Arctic winter is waning, commercial imagery satellites are once again more active over Severodvinsk.

On Feb. 10, an Airbus satellite took a high-resolution image of the harbor. Moored next to the quay is Belgorod with its torpedo tube doors appearing to be open. These tubes are not for ordinary torpedoes but rather the Poseidon nuclear-powered, nuclear-armed torpedo. It is one of Russian President Vladimir Putin's so-called wonder weapons, together with hypersonic missiles and a nuclear-powered cruise missile.

The satellite imagery clearly shows two large openings in the bow. Each opening is roughly six feet (two meters) across, approximately three times the diameter of the openings for regular 21-inch (533mm) torpedoes. This is because the Poseidon weapon is about 20 to 30 times the size of a traditional heavyweight torpedo.

Revealed in 2015, the school bus sized torpedo is a strategic weapon that is designed to slip under the U.S. ballistic missile defense network. The weapon is designed to "destroy important economic installations of the enemy in coastal areas and cause guaranteed devastating damage to the country's territory by creating wide areas of radioactive contamination, rendering them unusable for military, economic or other activity for a long time," according to a 2015 translation of the initial document by the BBC.

Previous reports indicate that Belgorod will be armed with six Poseidons. Being so large and nuclear powered, these are likely carried externally to the main pressure hull, so it is unclear whether all six tubes will have their own shutter doors or if they will be able to cycle through the two shutters seen in the satellite images. One takeaway from the images is Belgorod probably has a forward hull between the two open shutter doors. This could allow regular torpedo tubes to be mounted in the bow, shooting over top of the sonar.

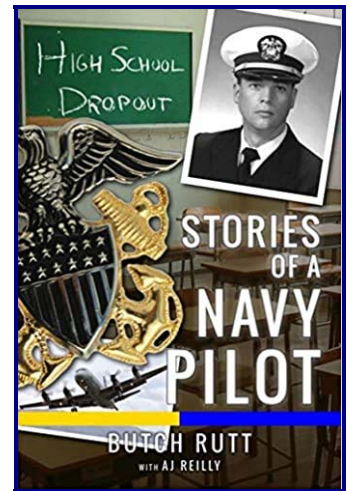
Although some reporting on the Poseidon implies Belgorod will be conducting test launches imminently, this is unlikely. It's unclear if the submarine has ever conducted submergence testing, and just today the TASS Russian news agency reported the submarine is preparing to sail to sea for the first time. The tests that the Izvestia article referenced are likely in-port mating and mechanical checks between the submarine and the weapon, which matches the satellite imagery showing the outer shutters open. This would likely be conducted with inert surrogate rounds where possible, given the safety implications of testing a nuclear-powered weapon with what is likely a minimally shielded reactor at the pier.

While the public image of Belgorod is becoming clearer, the particulars of the new Russian boat are still shrouded in mystery.

USNI News article by H. I. Sutton

RECOMMENDED READING:

“High School Drop Out: Stories of a Navy Pilot” by Butch Rutt (ISBN 978-1944783532) tells the story of how a high school dropout from a broken home overcame adversity to become a P-3 pilot for the Navy and U.S. Customs Service, and then later flew for the airlines. As far as I know this book is only available from www.amazon.com. It is very good. Check it out!



ON THE INTERNET:

A friendly reminder that there is a fairly active VP-92 group on Facebook. Go to www.facebook.com and do a search on “VP-92” to find it.

PARTING SHOTS:



ABOVE: VP-92 Flight engineer Mark Knox calculates weight and balance on board a P-3C during the squadron’s time at NAS Brunswick. If you have something similar to share, contact Marc Frattasio at marc_frattasio@yahoo.com.



Until Next Time, Lose Not Thy Speed In Flight Lest The Earth Rise Up And Smite Thee – “Frat”.

