Rear Admiral John Ryan (USN), Commander Fleet Air Mediterranean, came out with a briefing on "Patrolling the Pacific". A strange subject for a commander based in Europe unless you know that Rear Admiral Ryan served as Commander U.S. Patrol Wings Pacific between 1993 and 1995. He was relieved in the Pacific by another Rear Admiral Ryan: Norbert, his twin brother. The Pacific patrol squadrons of the U.S. Navy are facing some major changes in the near future. Four squadrons (three VPs and a VQ) moved into their new home base NAS Whidbey Island recently and four others (three VPs and a VPU) will move from NAS Barbers Point to MCAS Kaneohe Bay in 1999. Like most other MPA forces in the world there has also been a slight change in the mission of the Pacific patrollers. U.S. Special Forces and the U.S. Marine Corps are requesting more assistance from the P-3s since they have been fitted with brand new electro-optical systems. Commanders in the field are very happy to have an Orion available as their long-range, real-time eyes. Of course, Rear Admiral Ryan mentioned some facts about the operations in his current Command. The Iran Navy is closely watched as it becomes operational with its Kilo submarines earlier mentioned during this symposium. At first Iran had some trouble adapting the Russian Kilos to warm water operation but the results are getting better. Ryan expects a third Kilo to arrive in the area in the fall of 1996.

The SeaSearch symposium was concluded with some speakers from the industry. David Marsh presented new Rolls Royce engines for future maritime patrol aircraft and Peter Stean (British Aerospace) and Rick Kirkland (Lockheed Martin) both discussed maritime patrol aviation beyond 2000. The International Air Tattoo's organizers had succeeded in the creation of a unique and interesting symposium on many current and future aspects concerning the maritime world. ☆

Ilyushin Il-38 May - the Russian Orion

BY MARCO P. J. BORST

For years we believed the Ilyushin IL-38 May was an aircraft with the ability to conduct missions similar to the P-3 Orion. Well, the capabilities of this Ilyushin were an illusion! Yes, the May is the Russian Navy's standard shore-based patrol aircraft and, yes, it is a conversion from an airliner design like the Orion is a derivative of the Electra. And the May even looks a bit like a P-3. But that is where the comparison stops.

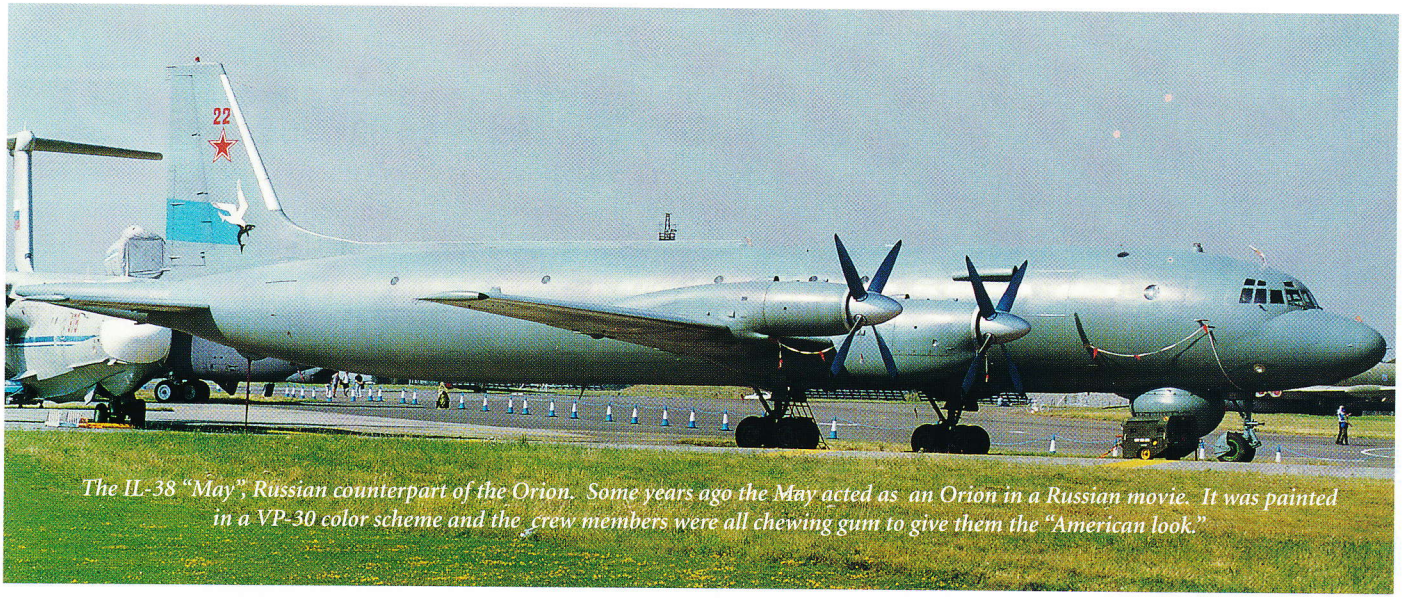
The Ilyushin IL-38 was developed from the IL-18 medium-range 110-seat passenger aircraft which was first flown in July 1957. The May itself has a lengthened fuselage and is fitted with a radome under the nose section, MAD boom and a weapons bay. The wing is much further forward than on the IL-18. The maiden flight of the May was on 20 July 1971 and it was delivered to the Soviet Naval Air Force shortly thereafter.

On 17 July 1996 a Russian Navy aircrew flew one of their IL-38s from Naval Air Station Ostrov in Russia to RAF's Fairford airbase to attend the SeaSearch static display at the International Air Tattoo 1996. It was not the first visit of the type to a NATO country – an IL-38 visited NAS Jacksonville in 1995. But it was the type's first appearance at an airshow in Western Europe and a unique opportunity for everyone to get a closer look at this *Pee-Threeski.*

The IL-38, which is called "Dolphin" within the Russian Navy because of the shape of its nose, has a cabin layout that is much different from the P-3. The entrance door of the aircraft is below the fuselage, just behind the radome. You enter the aircraft in an operational area where only two operators are situated: the acoustics operator and the tactical navigator. Both stations are installed against a pressure bulkhead. Five more crew members are in the cockpit: two pilots, a flight engineer, a navigator and a communicator. And that is all there is. Behind the pressure bulkhead the fuselage is unpressurized and almost empty. There is a small area for some baggage. No side walls, no ceilings – not even a floor! There is a small walkway between the fuselage and the large weapons bay and some kind of a "bridge" from the weapons bay to the far end of the fuselage. It really looks a bit like a submarine in there. This cabin layout explains the forward position of the wings.

Major Volkov in May cockpit

The May was flown to Fairford by an aircrew led by Major Volkov, the Commanding Officer of the ASW Squadron at Ostrov. He explained that his squadron operates only two IL-38s which are complemented by three Tupolev "Bears" and two Beriev M-12 "Tchaika" amphibian aircraft. The number of IL-38s built by Ilyushin is much less than the suspected production of approximately 60 aircraft. According to Major



The IL-38 "May", Russian counterpart of the Orion. Some years ago the May acted as an Orion in a Russian movie. It was painted in a VP-30 color scheme and the crew members were all chewing gum to give them the "American look."

Volkov only 35 IL-38s were built for and delivered to the (then) Soviet Naval Air Force; 30 of these are still operated by the (now) Russian Naval Air Force. Another five IL-38 were delivered to the Indian Navy in 1977 and 1978. Only one May was lost in an accident when one of the prototype aircraft had to ditch in the early seventies during trials with Ilyushin. This aircraft remained on the surface for 30 minutes and then sunk.

The Russian Navy is looking for a new ASW aircraft to replace the May. There has been some kind of a competition between the Tupolev Tu-204 (an Airbus look-alike turbofan powered airliner) and the Beriev (M-40 Albatross (a turbo-fan powered amphibian aircraft) and it seems that the Tupolev design is chosen by the Russian Ministry of Defense because this type is a proven concept, where the Beriev design is still in the prototype phase. In 1997 two Tu-204 airliners will be available to the Russian Navy for trials.

Major Volkov, who is an experienced naval aviator with 5000 flying hours, was proud to have tracked nine U.S. Navy submarines during his entire career. He explained that the IL-38 has an endurance of approximately 13 hours.

An average IL-38 maritime patrol mission lasts 8 to 9 hours. Minimum patrol speed of the May is 320 km/h and the minimum altitude is 90 to 120 feet during daylight operations and 300 feet during night and bad weather operations. But on one occasion Major Volkov was forced to fly much lower. That was when he was involved in a Search and Rescue mission to the "Maxim Gorky," a cruise ship that was in trouble some years ago. It was an operation with the "Mk1 Eyeball" as the primary tool in poor weather conditions: fog and low clouds. In order to be able to conduct this visual search for the ship Major Volkov had to fly his IL-38 below the fog at a level of just 15 to 30 feet! ☆

Technical data:	Illushin IL-38	Lockheed Martin P-3C
Length	133 ft 11 in (40.185 m)	116 ft 10 in (35.61 m)
Span	122 ft 8´ in (37.4 m)	99 ft 8 in (30.37 m)
Height	33 ft 4 in (10.17 m)	33 ft 8´ in (10.29 m)
Wing	1,507 sq ft (140 m2)	1,300 sq ft (120.77 m2)
Power Plant	4 Ivchenko AI-20M	4 Allison T56-A-14
Max. Thrust	4,225 ehp	4,910 ehp
Empty Weight	78,900 lbs (35500 kg)	61,491 lbs (27,890 kg)
Max. TOW	146,700 lbs (66000 kg)	135,000 lbs (61,235 kg)
Max. Cruise Speed	347 kts (645 km/h)	411 kts (761 km/h)
Service Ceiling	36,700 ft (11000 m)	28,300 ft (8,625 m)
Max. Ferry Range	4,050 nm (7,500 km)	4,500 nm (8,339 km)
Crew	7 - 8	10+
Max. Endurance	13 hrs	17 hrs

Note: Technical data of the IL-38 as provided by the Russian Navy at IAT 96.