Maritime Patrol in the JMC

by Marco P.J. Borst

It is 0823 hrs on a sunny morning in June. A Norwegian P-3C UIP Orion takes off from RAF Kinloss in Scotland. The Orion is part of a task force of the Blue Alliance, while Kinloss is situated in the middle of an area occupied by Yellow in Greenia. But that does not count now. What is important is what happens from the moment that the Orion is on task. Joint Maritime Course 2000-2 has started for Crew 2 of the Norwegian Air Force's 333 Squadron.

all RAF Coastal Command Shackleton squadrons attended a JASS course once a year. From the beginning foreign participants were allowed to take part in the JASS courses. Norway, the United States of America and Canada were amongst the original JASS participants.

Given the political climate in Northern Ireland, JASS moved to RAF Turnhouse in the early seventies. Almost at the same moment, new elements were brought into the exercise. With strike attack fighters and tankers and, of course, host-country Great Britain have been taking part in the JMC. The nature of the exercise follows reality. During the Cold War the JMC scenarios were based on the perceived danger from Eastern Europe, but the JMC's of today are multi-national operations to control a crisis: a scenario that looks like what happened in and around countries like Iraq and former Yugoslavia not too long ago. Every year three JMC's are organized: JMC 1 in January/February, JMC 2 in June and JMC 3 in October/November.

Central coordination of the JMC moved to Faslane (a British submarine base) and the exercise is conducted around Scotland since then. Participating Maritime Patrol aircraft are operating off RAF Kinloss most of the time. The local JMC Cell at Kinloss is responsible for coordination between Faslane and the MPA crews, and supports daily operations by preparing the missions and briefing the crews.

Joint Maritime Course 2000-2 (JMC002)

For JMC002 ten MPAs were available at RAF Kinloss to provide round-the-clock operations: a P-3C UIP Orion (Norway/333Sqn), a P-3C-II Orion (Australia/10Sqn), a P-3B Orion (Spain/221Sqn), two CP-140 Auroras (Canada/14 Wing), an Atlantique NG (France/23Sqn) and four Nimrods (Great Britain/120Sqn, 201Sqn and 206Sqn). The Norwegians and the French each came with two crews, thus using their aircraft more often than those of the other participants.

JMC missions usually become more complicated during the course of the exercise. The first mission for Norway's crew 2 is a relatively simple CASEX-B in cooperation with a Norwegian submarine: the HNOMS Uthaug. It is more or less up to the Orion's crew to decide what and how they want to practice their skills with the submarine. Less then twenty minutes after take off "X8F" reached the operation area and descended from



French Navy Atlantique 2

(Marco Borst)

JMC's History

The early history of the Joint Maritime Course starts during World War II. Because of the threat from German U-boats, the need to train crews of ships and aircraft in antisubmarine warfare operations was recognized. Shortly after the war, the Joint Anti-Submarine School (JASS) was established in Londonderry, Northern Ireland. At HMS Sea Eagle crews of bombers, submarines and surface ships were taught by Royal Navy and Royal Air Force officers. Every course was completed with an exercise to practice the theory. At the time, the aircraft were operating from RAF Ballykelly, while the ships operated from Londonderry. Crews of

taking part, the character of the exercise changed from an ASW exercise into an exercise with a much broader perspective. This was the reason to change the name of the course from Joint Antisubmarine School into Joint Maritime Course.

JMC Today

The JMC still is an exercise which is organised by the Royal Navy and the Royal Air Force, but it has many international participants, since NATO and other partners are invited to take part. Throughout the years, ships and aircraft from Norway, Canada, the USA, Portugal, Spain, Germany, Italy, France, The Netherlands, New Zealand, Australia



Nimrods on the RAF Kinloss flightline

(Marco Borst)

12,000 ft to 1,000 ft. Here the search for the Uthaug started, and it lasted a bit longer then expected since the submarine appeared to be much more to the south then expected by the Orion's crew. At 0940 hrs the pilots on the flight deck had their first visual contact with the periscope of the submarine. The crew of the Norwegian 333 squadron can rely on the perfect tool for the job: their Orion (#3298 "Viking") went through the Update Improvement Program (UIP) at Lockheed-Martin's Greenville (SC) facility last year. The P-3C UIP has brand new sensor stations at the TACCO, NAV-COM, radar and ESM positions. Large and clear tactical displays and userfriendly touch control keyboards provide the crew with a good picture of the situation. An important part of the detection equipment is the APS-137 radar. It is with this Inverse Synthetic Aperture Radar that the submarine's periscope was first detected. The aircraft descended to 200 ft and dropped a passive-sonobuoy pattern to enable the wet-sensor operators to follow the sub for a while. Shortly after they changed to active tracking, the most frustrating thing that can happen to a hard-working ASW crew happened: the Orions central processing computer froze and rebooting was the only option. This meant that the TACCO, NAVCOM and radar stations, and the tactical display on the flight deck, went unserviceable for a couple of minutes, leaving the

crew bereft of important information. The wet- sensor stations remained operational and, with the help of paper, pencils, a calculator and the good old Eyeball Mk1 the attack on the Uthaug could continue with success. Mission "X8F" was completed and the Orion returned to RAF Kinloss where it landed at 1245 hrs. The Norwegian ground crew started to make the Viking ready for another mission immediately because the other crew needed the aircraft that same evening.

JMC002's Scenario

The scenario for this exercise could have come from a morning newspaper. The only non- realistic part of it were the names of the countries involved: "Greenia" was the country around which everything revolved. It is a large country at a strategic location with a lot of industry and rich mineral wealth. The Blue Alliance is formed of a number of nations interested in the political, economic and military stability of Greenia. The population of Greenia is divided as a result of religious and cultural differences: Green is loyal to the elected government, and has Blue as their natural allies and trading partners. Yellow is the opposition formed by religious radicals who want to break all connections with Blue. Yellow has a lot of unemployment and has only traditional industry, while Green has hi-tech industry in which the government has invested a lot over the years.

Yellow leaders became more popular in 1999. They directed political demonstrations supported by terrorist actions against the Greenian government and properties of the loyalists. In January 2000 a revolution followed. The Yellow leader took control over the greater part of the army. Strong fighting lasted a couple of days, and resulted in an almost equal division of the army into a Yellow and a Green army. The navy came almost entirely under Yellow control, and also a large part of the air force came under Yellow command. Surrounding nations (Blue) declared their support to the Greenian government, but were not very willing to start a military intervention. In April Blue condemned the Yellow actions in a UN resolution. A Temporary Exclusive Zone (TEZ) was established in the Greenian territory. A Blue Alliance Support Plan had to ensure free movement of ships along the most important routes to Greenia, and free access to the port of Loch Eve until Greenia resolved control over its most important port, and effective presence in the TEZ to support Green and to be able to evacuate Blue citizens out of Greenia if necessary. The Yellow Revolutionary Air Force with 120 aircraft, together with the navy, was the biggest threat for Blue.



Major Tobjorn Haugen (333 Sqn Norway) at the new TACCO station on the P-3C UIP (Marco Borst)

RAF Kinloss' Role

It looks a bit complicated, but according to the JMC002 scenario the flying and floating fleets of Blue and Yellow are exactly the same. Depending on the mission, participants can be tasked with a Yellow or a Blue mission. The aircraft at RAF Kinloss were part of CTG605.06 of the Blue Task Organization, but a couple of pages further on in the scenario they were part of CTG315.06 of the Yellow Task Organization. For the MPA's at RAF Kinloss this JMC only flew one Yellow mission. Although Kinloss, geographically speaking, was situated right in the middle of Yellow area, it was mainly Blue on the base.

On the fourth day of the exercise,

and ESM equipment. During this mission it was very interesting to see how seriously the crew worked along the lines of the exercise scenario. The Nimrod crew cooperated with a Blue frigate. On board the aircraft, communication between the Blue ship and the Yellow sub was monitored. The submarine commander demanded from Blue that the Nimrod be sent away from the area, but this demand was rejected by virtue of the UN resolution. When the submarine started to dive after a while, its commander was warned that Blue would consider leaving persicope depth as an act of war. The Dolfijn's commander brushed aside the Blue objections and took up an attack position: reason enough for the Nimrod crew to

some kind of an adventure for the photographer: the crew opens up a window and one of the crew members sticks his head out of it, operating the hand-held camera while the aircraft passes the ship! Aircraft 9XK went off task at 1450 hrs and returned to RAF Kinloss at 1530 hrs.

Exercises like the Joint Maritime Course are an important aspect of the annual training program of the air forces and navies of several nations. It helps make the crews of ships and aircraft familiair with the kind of operations they can be called for any day, any time and anywhere. Practice makes perfect...

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(RAF 120 Squadron)



Flt Lt Ross McKenzie (left) and USN Exchange Officer Lt Mike Callahan on the flightdeck of Nimrod XV248: (Marco Borst)

About the Author



Marco P.J. Borst makes it his hobby to describe the history of the Lockheed Martin P-3 Orion. As a freelance journalist, he has visited several P-3 operating squadrons, and has written several articles on the P-3 Orion. He co-operates with Jaap Dubbeldam in the P-3 Orion Research Group. The P-3 Research Group has recently published a second booklet on the P-3 in English. Marco Borst also established, and maintains, an informative home page about the P-3 Orion on the Internet. This page, which is frequently updated, can be found http://home.wxs.nl/~p3orion/.

120 Squadron's Crew 4 had to conduct a Blue sortie against a sumarine of the Yellow navy. With the roaring of four Rolls Royce Spey jet engines, Nimrod MR2P "9XK" took off from runway 26 at 0812 hrs. After fifteen minutes of flying the aircraft descended to conduct a series of MAD-compensation manoeuvres. After that, sixteen sonobouys were dropped into the ocean. The search for the Yellow submarine had started. The effective Search Water radar detected the persicope of HNLMS Dolfijn at 0910 hrs. The contact was verified with MAD

come into action. They succesfully attacked the Yellow submarine.

An odd change in the mission came when the Blue Nimrod left the operation area to return later as a Yellow Revolutionary Air Force MPA. It felt strange first to keep a Blue vessel informed about the movements of the Yellow submarine, and to make it hot for the Blue ship in cooperation with the sub they just destroyed within just half an hour of time! The Nimrod's mission was completed with a couple of photo runs along the surface ship. Doing photo runs with a Nimrod is