



## New Forest Aviation Group.

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#### 2016 TALKS

8<sup>th</sup> July – 'Poole and It's Flying Boats' by Mike Phipp

#### August – No meeting

September 9<sup>th</sup> – 'Lawrence - Before and after Arabia' by Colin van Geffen

October 14<sup>th</sup> – 'Working on HM submarines' by Ray Jones

11<sup>th</sup> November - 'The Cowboy, the Revolutionary and the Novelist - three unsung aviation pioneers' by Graham Spiller

#### December – No meeting



Our June talk was entitled Nimrod MPA4 by Andrew Collins. Andrew was a former RAF pilot on the Nimrod fleet and was offered a training post in British Aerospace when he left the RAF in 1998. He started his talk with a description of the diverse roles expected of a Maritime Patrol Aircraft which covers maritime surveillance, anti-ship and anti-submarine warfare, search and rescue and the lesser obvious roles of command and control and overland warfare. The vast area of sea around the British Isles also demands an aircraft with good dash and loiter capability. To satisfy the roles a range of sensors are required such as good visual ports, radar, electronic support measures, magnetic anomaly detector, comprehensive communication suite and acoustic abilities. The range of weapons to be carried include torpedoes, sonobuoys, anti-ship and anti-aircraft missiles, and for rescue work smoke floats and dinghies.



It is clear that any MPA will be highly complex and sophisticated to satisfy the roles and equipment required. The Nimrod type came into being following Air Staff Target 357 set in 1963 for an aircraft to replace the ageing Shackleton. The successful aircraft was the HS801 denoted as MR1 and based on the Comet 4C but with Spey engines for better power and economy with an order book of 38. This gave a dash speed of 400knots with a loiter capability using two engines only. The aerodynamics were good and enabled a consistent tight turning circle of 3,000yd for maintaining target contact. Shortly afterwards an R1 Electronic intelligence version was ordered to replace Comets and Canberras of 51Sqn.

In 1975 an update was ordered denoted as MR2. These had updated electronics including Searchwater radar, updated acoustic processing as well as enhanced sonobuoy operations. The Falklands campaign saw refuelling probes and sidewinders added with the Gulf War providing updated ESM.

Meanwhile there had been an attempt to produce an Airborne Early Warning version to replace the Shackleton AEW in the latter part of the 70s but cost overruns combined with lack of performance resulted in its cancellation in 1986 with the Boeing E3 Sentry aircraft being purchased.



Eventually the MR2 needed replacing and so enter the MPA4 in the late 90's after a range of MPAs from other countries had been evaluated by the turn of the century. Although the basic Comet/Nimrod fuselage was reused, virtually everything else was new. The engines were the BR710 which offered better economy but a new wing was required. Modern computer controlled machine accuracy came a cropper against bespoke built aircraft with variable dimensions and hole settings. The planned in service date slipped rapidly and cost overruns were cataclysmic which eventually forced the closure of the programme with destruction of airframes in October 2010. pto