



Royal Malaysian Air Force (RMAF) Hawks, a Hawk 108 training aircraft flying above a Hawk 208 combat aircraft



The badge of the Royal Malaysian Air Force, which in Malay is Tentera Udara DiRaja Malaysia (TUDM). Its motto Sentiasa di Angkasa Raya means "Always in the Sky".



A miniature ceramic feedthrough filter used on the RMAF application

Equipping Royal Malaysian Air Force Hawks

MPE ceramic filter products have been incorporated in BAE Systems Hawk aircraft platforms for over 20 years, ensuring the electromagnetic compatibility, one with another, of disparate electrical and electronics avionics systems operating on board, such as instrumentation, navigation, communications and weapons systems. First flown back in 1974, the Hawk is primarily utilised as a training aircraft, although it is also currently deployed by several air forces around the world in front-line active roles.

One such user is the Royal Malaysian Air Force (RMAF), which maintains a complement of 18 Hawk aircraft based at RMAF Labuan in Sabah state, East Malaysia. They comprise four Hawk 108 training aircraft and 14 Hawk 208 combat aircraft.

The Hawk 108 is a two-seat advanced weapons trainer export version for the Royal Malaysian Air Force with additional avionics, optional FLIR infrared, a redesigned wing and features such as BAE Systems' Sky Guardian radar warning receiver (RWR) and wingtip launch rails. Ordered in 1990, these aircraft were delivered from 1994 to 1995. The Hawk 208 is a single-seat, lightweight multi-role combat aircraft export version for the Royal Malaysian Air Force. It has been used in air defence, airspace denial, anti-shipping, interdiction, close air support and ground attack roles.

As widely reported, the Royal Malaysian Air Force recently scrambled an unspecified number of its Hawk 208 aircraft to confront a squadron of 16 People's Liberation Army Air Force (PLAAF) aircraft over the South China Sea. Taking place on 31st May 2021, the encounter played out within the Kota Kinabalu flight information region (FIR). Having been first detected by the air defence centre in Sarawak, the aircraft were flying in an "in-trail" tactical formation when they abruptly changed direction towards Malaysia and the Hawk aircraft were scrambled to intercept.

MPE's range of miniature ceramic feedthrough filters are suitable for the filtering of power lines and control lines and are also used within other airframes, such as the Eurofighter Typhoon. The circuit configuration of the filters provides optimum performance and an exceptional level of impedance. With many 100,000s of filters supplied for service across the past 30 years, these products from MPE are highly trusted for a host of mission-critical applications in defence and aerospace.

As confirmed by the Malaysian Minister of Defence Hishammuddin Hussein on November 25th 2021, the Malaysian government has now begun evaluating proposals to replace the country's ageing fleet of Hawk Mk108/208 light attack and lead-in trainer aircraft. This future programme is looking to purchase 36 airframes in two phases. 18 are to be procured initially, with the remainder being acquired from 2025 onwards.

In the intervening period MPE continues to support the current fleet of Hawk aircraft in Malaysia with further supplies of EMC filter products in 2022 for retrofit and spares. For more information on MPE's range of high-reliability ceramic filter products, please check out www.mpe.co.uk/products/ceramic-msks/