

Bloodhound SAM

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(Redirected from Bristol Bloodhound)

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For other uses, see Bloodhound (disambiguation).

Bloodhound Mk 2



A Bloodhound missile at RAF Museum, Hendon, London.

Type	SAM
Nationality	UK
Era	Cold War
Launch platform	Fixed installation
Target	High altitude bomber

History

Builder	Bristol Aeroplane Co.
Date of design	1950's
Production period	

Service duration	1958 (MK 1)/1964 - 1991
Operators	RAF, RAAF, Switzerland, Sweden, Singapore
Variants	Mk 1, Mk 2
Number built	783
Specifications	
Type	MK 2
Diameter	54.6 cm (body)
Wing span	2.83 m
Length	8.46 m (with booster)
Weight	2,270 kg
Propulsion	2 x Ramjet, 4 x solid fuel booster
Steering	Control surfaces
Guidance	Semi-active radar
Speed	Mach 2.7
Range	185 km
Ceiling	
Payload	
Warhead	Continuous-rod warhead
Trigger	Proximity fuze

The **Bristol Bloodhound**, a British surface-to-air missile, was developed during the 1950s as the UK's main air defence weapon and was in large-scale service with the Royal Air Force (RAF) and the forces of four other countries from 1958.

The Bloodhound served the RAF throughout almost the entire Cold War. The Bloodhound Mk I entered service in December 1958, the last Mk II missile squadron stood down in July 1991.

History

A contract was placed with the Bristol Aeroplane Company in 1947. The project, initially known as "Red Duster," became the Bloodhound. Deployment of the Bloodhound Mk I began in 1958 at the culmination of a development process begun a decade earlier by the Bristol Aeroplane Company and Ferranti Ltd (both now part of BAE Systems) — the latter providing the radar guidance and control. **Bloodhound 1** was used to protect the V-bomber bases and was usually installed nearby. Its pulsed radar could be jammed and was vulnerable to ground 'clutter', thus degrading low-level capability. These short-comings were quickly tackled, and resulting in **Bloodhound 2** joining the RAF in 1964.

The Mk I's pulsed Type 83 radar was replaced with a continuous wave Type 86 or Type 87 radar, both of which were less susceptible to jamming. The Mk II was given a more powerful Thor engine and could engage targets at higher and lower altitudes than its predecessor. The first site to be developed solely for the Mk II system was RAF West Raynham, Norfolk, construction beginning in 1964. The Type 85 gave way to the Type 86 "Indigo Corkscrew" target illumination radar.

Bloodhound was also stationed abroad, and in 1970 (after the Royal Navy's Polaris submarines had assumed the strategic deterrent role) all systems within the UK were withdrawn and either stored or transferred to RAF Germany for airfield defence. Changing operational requirements later prompted a re-appraisal of this policy in the light of the low-level threat, resulting in No. 85 Squadron forming at West Raynham on 18 December 1975. Its first missiles became operational with 'A' Flight and assigned to NATO on 1 July 1976.

In South East Asia, the Bloodhound was deployed with the RAF No. 65 Squadron based out of Seletar AFB, Singapore as part of the RAF Far East Air Force. With the withdrawal of British forces announced in 1968, Singapore bought over the entire Bloodhound assets of the No. 65 Squadron and established the Singapore Air Defence Command's 170 Squadron.

There was an export version, Bloodhound 21, planned that had less sophisticated electronic countermeasures equipment.

As at 2006 the only surface-to-air missile in RAF service is the Rapier missile which has a much shorter range and a very much lower altitude capability.

A missile that is very similar in appearance, the Thunderbird, was produced for and operated by the British Army anti-aircraft artillery units to provide a more mobile defence system.

Variants

Mk I

- Length : 7.7 m
- Launch Weight : 2,000 kg
- Range : 80 km
- Max. Speed : Mach 2.2
- Propulsion
 - *Main* : 2 x Thor ramjet engines



Model of a Bloodhound missile. Solid-fuel boosters in yellow, ramjets in white

- *Booster* : 4 Gosling booster rockets



One of the two Thor ramjet engines of a Bloodhound missile (not a model)

Mk II

- Length : 8.45 m
- Launch Weight :
- Range : 185 km
- Max. Speed : Mach 2.7
- Propulsion
 - *Main* : 2 x Thor ramjet engines (Improved)
 - *Booster* : 4 Gosling booster rockets

Mk III

The planned Mk III (also known as RO 166) was a nuclear warhead equipped Mark II with a longer range (around 75 mile) achieved with improved Ramjet engine and bigger boosters. The project, one of several adaptations of existing British missiles to carry tactical nuclear devices, was cancelled in 1960.

Mk IV

This would have been a mobile version of Bloodhound.

- **RB-65** : Swedish military designation of Mk I
- **RB-68** : Swedish military designation of Mk II
- **BL-64** : Swiss military designation

See also

- Thunderbird (missile)

Details from Wikipedia

http://en.wikipedia.org/wiki/Bristol_Bloodhound