

Modern Spearhead – Guidelines for generating Aircraft Stats

<http://modernspearhead.net/>

The following is a basic guide to how aircraft factors were calculated for MSH. Remember each Aircraft Sortie (Stand) represents 4 real aircraft.

DEF - Defence

Unfortunately the DEF factors are somewhat subjective and there is no clearly defined formula we used. We suggest you find existing aircraft of comparable performance and with similar defensive systems (chaff, flares, etc) on the data cards and use their rating as a guide.

CAN - Cannon

The base factor is worked out on the number of cannons present, including those on fixed mounts in the aircraft, and those slung under wing or fuselage in pods. The base cannon are assumed to be of 23mm-30mm in calibre and have reasonable ammo (about 70 rounds or more per cannon averaged out). Count 2 Heavy Machine Guns (0.5", 12.5mm-17mm) as equivalent to 1 Cannon to a maximum of 2 Cannon equivalents. The factor is determined as follows:

Cannons	1	2	3-4	5-8	9+
CAN	6	5	4	3	2

If the aircraft has 5 or more Cannon "equivalents" but the majority (half or more) are from Machine Guns increase the factor arrived at above by 1 (e.g. an aircraft with 5 Cannon equivalents is CAN 3 but if they consisted of 2 x 23mm Cannon & 6 x HMG the factor is increased to CAN 4 to represent the light nature of the majority of the firepower).

RKTS & BOMB – Unguided Missiles & Rockets and Unguided Bombs

These factors are based principally on the ordnance payload of the delivery aircraft assuming a reasonable level of technology for target sighting (i.e. Bomb Sights), and the aircraft's ability to deliver them in an appropriate fashion. The Rocket factor assumes the unguided missiles or rockets carried are up to the full payload weight – if not use the actual weight of that ordnance not the aircraft's capacity. Compare Payload to the type of Ordnance below:

Payload:	Up to 750kg	1000-1750kg	2000-4000kg	4500-7000kg	Over 7500kg
RKTS	6	5 ¹	5	4	3
BOMB	6	5	4	3	2

¹ May occasionally be factor 6 if only 1000kg or so and/or limited capability Rockets.

Also Note in MSH the breakpoints originally used for the first 2 factors were approximately 250kg & 1000kg – the new Payload breakpoints are designed to produce a more realistic effect for aircraft with light loads.

OTHER – SB, ICM, NAP, ARM, and ADM

SB (smart Bombs), ICM (Cluster Bomblets & Similar), and NAP (Napalm) & FAE (Fuel Air Explosives) are rated similarly to Bombs:

Payload:	Up to 750kg	1000-1750kg	2000-4000kg	4500-7000kg	Over 7500kg
SB	No	5	4	3	2
ICM	No	5	4	3	3
NAP or FAE	5	5	4	3	3

ARM (Anti-Radiation Missiles) are rated as follows:

ARM 5 when only 2 missiles are carried; typically Soviet strike aircraft for example who, when they ARMs, carry a small number of them each rather than have dedicated ARM equipped units.

ARM 4 in the vast majority of cases; typically dedicated SEAD aircraft with several missiles each, as in the USAF.

ARM 3 in special circumstances when SEAD aircraft are carrying a large number of the latest missile.

ADM ("Air" Delivered Mines) – if an aircraft has this ordnance available it has ADM (see rule 15.2.1) and there are no factors required.