

Decisive Campaigns: Community Project

Version 1.03

How to calculate stats

One of the things I found hard was how to determine stats for a new unit type in the *troop type editor*. So I asked **VR** for info on this, and got his notes on how he made stats for *DC: Warsaw to Paris*. From these notes, and the actual stats made available in the editor, I derived the following ways to calculate new unit types stats. I think we can all benefit from calculating our stats roughly the same way, if we are going to be sharing our *troop type libraries* with each other, so please feel free to use these.

For the **infantry** troop type there really is no fixed way of calculating, these are done by feeling what is right. Below are some examples.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Militia	8	16	8	8	100	0	0	0	0	0
Soviet Rifle	10	20	10	10	100	0	0	0	0	0
German Rifle	10	20	10	10	100	0	0	0	0	0
SS Rifle	12	24	12	12	100	0	0	0	0	0

Infantry guns use the following calculations, that is guns without range, that are used in direct attacks.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Infantry Gun type	Caliber (in mm)	75% of att soft	10	10	100	0	0	0	0	0
75mm LeIG	75	50	10	10	100	0	0	0	0	0
76mm Field Gun	76	50	10	10	100	0	0	0	11*	0

*The unit is really a ranged unit and thus has some vs. naval value.

For anti tank guns, or simply **AT Guns**, the following calculations are made. Again note that these do not have a ranged attack. Same calculations are made for heavy and light AT Guns.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
AT Gun type	6	6	50% of def hard	Caliber (in mm) +10	100	0	0	0	0	0
76mm AT Gun	6	6	43	86	100	0	0	0	0	0
37mm PAK	6	6	23	47	100	0	0	0	0	0
50mm PAK	6	6	30	60	100	0	0	0	0	0

Artillery which is the next category is basically anything with an attack range of more than 1 hex. Usually this will mean it has an attack range of 2 hexes. The same calculations are used for heavy, light or even medium and super heavy artillery.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard howitzer type	Caliber (in mm) /2	75% of att soft	10	10	100	0	0	0	(Att soft +15) /4	0
105mm LeFH	53	38	10	10	100	0	0	0	16	0
122mm Howitzer	66*	50	10	10	100	0	0	0	19	0
150mm LeFH	75	57	10	10	100	0	0	0	21	0
152mm Howitzer	75	57	10	10	100	0	0	0	21	0
210mm Morser	105	75	10	10	100	0	0	0	24	0

* Note how you can make some equipment get a 5 point bonus for quality or efficiency.

Light Flak is different from **heavy flak** in only one aspect. Heavy flak gets full scores in hvy flak while light flak only gets half those scores. Look in the table below for examples. (70mm and above is heavy flak)

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Light flak type	10	10	50% of def hard	Caliber (in mm)	100	Caliber (in mm) / 2	Caliber (in mm)	0	0	0
Heavy flak type						Caliber in mm				
20mm Flak	10	10	10	20	100	10	20	0	0	0
37mm AA Guns	10	10	18	37	100	18	37	0	0	0
88mm Flak	10	10	44	88	100	88	88	0	0	0

Staff and **engineers** uses the comparison system from infantry. That is we look at what seems to be similar and give the same stats. Here is an overview of staff and engineers from **VRs Volkov to Tichvin**.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
German Staff	6	8	6	6	100	0	0	0	0	0
Soviet Staff	6	8	6	6	100	0	0	0	0	0
German Engineers	6	8	6	6	100	0	0	0	0	0
Soviet Engineers	6	8	6	6	100	0	0	0	0	0

As can be seen, they are not good at combat, but neither are they supposed to be, they are specialized troop types, that serve other functions.

Staying with the straight forward, let us look at **trucks** and **trains**. These are simple to... and are identical for Soviets and Germans, so should probably be the same for no matter what nation you are trying to make.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Trucks	0	0	0	0	100	0	0	0	0	0
Trains	0	0	0	0	100	0	0	0	0	0

Cavalry is another troop type that needs to be evaluated by feel. Here is the stats of Soviet cavalry.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Soviet Cavalry	15	20	10	10	100	0	0	0	0	0

Now we come to **tanks**. Tanks are difficult to calculate compared to the rest of the troop types. Never the less they have their formulas.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard Tank*	10+caliber gun (mm)/4 +speed (km/h)/20	75% of Att soft	Caliber (in mm) + 10	75% of Att hard	40+ speed (km/h) x2 + weight (100 kgs) /10 + armor (in mm) /2**	0	0	0	0	0
KV-1	42	32	86	64	310	0	0	0	0	0
T-34	61	45	86	54	256	0	0	0	0	0
T-60	42	32	30	22	150	0	0	0	0	0
T-70	50	38	55	41	206	0	0	0	0	0
T-26	32	24	30	22	100	0	0	0	0	0
Pz 38(t)	44	33	47	35	136	0	0	0	0	0
Pz II f	40	30	30	22	150	0	0	0	0	0
Pz IV f	52	39	38	28	186	0	0	0	0	0
Pz IV g	52	39	85	64	186	0	0	0	0	0
Pz 35(t)	44	33	47	35	115	0	0	0	0	0
Pz III h	47	35	60	45	194	0	0	0	0	0
Pz III j	47	35	75	56	182	0	0	0	0	0
Tiger	60	45	98	73	292	0	0	0	0	0

* Please note that these are approximations, and individual stats may vary do to quality, lack of quality etc.

** Approximation

Armored cars are similar to tanks. Just without tracked movement basically. Stats are as follows. No examples of these exist in the **VR** scenario
Volkhov to Tichvin

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard Armored Car	10+caliber (mm)/4	75% of Att soft	Caliber (in mm) + 10	75% of Att hard	40+ weight (100 kgs) /10 + armor (in mm) /2	0	0	0	0	0

Self propelled guns, or **SP Guns**, are the subject of this next table. Note these are not Self Propelled artillery nor Self Propelled AT Guns.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
SP Gun Type*	10+ caliber (mm)/2 + speed (km/h) / 10**	75% of att Soft	20 + caliber (mm) x 2/3*	Same as Att hard	40+ speed (km/h) x2 + weight (100 kgs) /10 + armor (in mm) /2**	0	0	0	0	0
Su-76	56	40	64	64	164	0	0	0	0	0
SU-122	74	56	100	100	246	0	0	0	0	0

* Note german SP guns have a different formula.

** Approximation

Now let us take a look at Self propelled artillery, or **SP Artillery** as it is also called.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard SP Artillery	Caliber (in mm) /2	75% of att soft	10	10 + caliber (in mm) / 30	100	0	0	0	(Att soft +15) /4	0
15cm SIG-33	100	75	10	20	100	0	0	0	21	0

As for the last armored type, the Self propelled Anti Tank Gun, or simply SP AT Gun, let us take a look at it now.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard SP AT Gun	20+caliber gun (mm)/4 +speed (km/h)/20	Same as Att Soft	Caliber (in mm) x 3/4 + 8*	Same as Att Hard	25+ speed (km/h) x2 + weight (100 kgs) /10 + armor (in mm) /2*	0	0	0	0	0
Marder II	40	40	45	45	148	0	0	0	0	0
Marder III	40	40	65	65	148	0	0	0	0	0
Pz JI	34	34	42	42	114	0	0	0	0	0

* Approximation

The next trooptype we will be looking at is the **fighter**. It too has a lot of information you need to gather to be able to calculate its stats properly.

Type / Example	Att soft	Def soft	Att hard	Def hard	defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard Fighter	Highest caliber (mm) /2	0	Total calibers* (mm) / 10	0	((Speed (mph)-100)/5 + 25 pr extra engine) x 2	0	0	((Speed (mph) - 100) + Total calibers* (mm)/5 + (climbrate (feet pr. min)-1000)/100) x 2	Total Calibers* (mm) /10 Or Highest Caliber /2	50% of vs. Naval
Bf 109e	6	0	10	0	102	0	0	53	10	5
Bf 109f	4	0	10	0	108	0	0	56	10	5
FW 190a	18**	0	20**	0	122	0	0	72	10	5
Bf 110c	8	0	10	0	130	0	0	32***	10	5
Lagg-3	5	0	5	0	96♦	0	0	41♦	5	2
Mig-3	10	0	3	0	112♦	0	0	36♦	5	2
Yak-1	10	0	5	0	100♦	0	0	48♦	5	2
Polikarpov I-16	10	0	5	0	76♦	0	0	34♦	0	0

* Total Calibers understood as all guns added up.

** Bomber calculation can be used if bomber stats are better.

*** An awkwardness modifier can be used.

♦ Sometimes stats are less due to pilot inexperience, lack of air tactics and the like.

Next up are the **bombers**, these aircraft are all bomber types, except for divebombers.

Type / Example	Att soft	Def soft	Att hard	Def hard	Defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard Bomber	Bombload (kgs) / 64	0	Bombload (kgs) /160	0	$((\text{Speed (mph)} - 100)/5 + 25 \text{ pr extra engine}) \times 2^*$	0	0	$((\text{Speed (mph)} - 100) + \text{Total calibers}^* (\text{mm})/5 + (\text{climbrate (feet pr. min)} - 1000)/100) \times 2^{**}$	Bombload (kgs) /110	50% of vs. Naval
Pe-2	25	0	10	0	140	0	0	29	14	7
Polikarpov U-2	10	0	5	0	50	0	0	4	5	2
He-111h	48	0	19	0	112	0	0	15	24	12
Ju-88a	48	0	19	0	120	0	0	15	24	12

* Total Calibers understood as all guns added up

** A negative modifier may apply due to awkwardness.

Finally the **divebombers**. Unlike bombers these only have the range of fighters, but are good against naval, and tanks.

Type / Example	Att soft	Def soft	Att hard	Def hard	Defense	Hvy flak	Lt flak	Dogfight	Vs. naval	Vs. sub
Standard divebomber	Bombload (kgs) x 5/32	0	Bombload (kgs) /40	0	((Speed (mph)- 100)/5 + 25 pr extra engine) x 2*	0	0	((mph) - 100) + Total calibers* (mm)/5 + (climbrate (feet pr. min)- 1000)/100) x 2*	50% of Att hard***	50% of vs. Naval
Ju-87b	50	0	50**	0	62	0	0	21	24	12
Hs 123	8	0	23	0	44	0	0	19	10	5
IL-2 Sturmovik	40	0	50**	0	66	0	0	18	50**	25

* Total Calibers understood as all guns added up

** Note how quality and purpose building can modify stats.

*** Approximation