

A machine descending too flat and so losing flying speed is said to be "doing a pancake."

A machine "banking" describes the angle taken up by the planes when turning.

Balloon Terms.

Rigid—A term applied to a dirigible balloon whose envelope is provided with a stiff framework to keep it in shape.

Semi-rigid—A term applied to a dirigible balloon which maintains its shape partly by the assistance of a suitable framework.

MUSKETRY NOTES.

The use of elaborate tables for wind, movement, effective beaten zone, penetration, etc., is not recommended, but it is desirable to have a ready reference for convenient ranges, which should be memorized.

The following tables have reference to mark VII. ammunition:—

Effective Beaton Zone.

Range 500 yards	..	E.B.Z. 7 ft. x 350 yards
" 1000 "	..	" 14 ft. x 180 "
" 1500 "	..	" 22 ft. x 150 "

The permissible error in sighting elevation is equal to half the depth of the E.B.Z.

Trajectory Table.

Range 500 yards	..	Highest point 2.3 ft. at 300 yards
" 1000 "	..	" 17.8 ft. at 600 "
" 1500 "	..	" 69 ft. at 900 "

Wind.

For head and rear winds no allowance need be made for ranges under 1000 yards. For ranges exceeding 1000 yards

add or deduct from the sighting elevation 50 yards in the case of a strong wind.

For right-angle winds allow—

		Mild (10 miles per hour).	Fresh (20 miles per hour).	Strong (30 miles per hour).
300 yards	..	1 ft.	2 ft.	3 ft.
500 "	..	2 ft.	4 ft.	6 ft.

For oblique winds allow half above.

Movement.

Up to 500 yards range, aim should be taken:—

Per each 100 yards of range.

About 1 foot in front of a man walking.

" 2 feet in front of a man doubling.

" 3 feet in front of a horse trotting.

" 4 feet in front of a horse galloping.

Aim in front of an aeroplane six times its length, and at the nose of an airship.

To Raise Point of Impact.

Range 800 yards	..	6 ft.	} Increase the sighting elevation 100 yards.
" 1000 "	..	10 ft.	
" 1500 "	..	27 ft.	

Grouped Ranges.

	Range	Rifle	Field Art.	Heavy Art.
Distant	..	2800 to 2000	6500 to 5000	10000 to 6500
Long	..	2000 to 1400	5000 to 4000	6500 to 5000
Effective	..	1400 to 600	4000 to 2500	5000 to 2500
Close	..	600 & under	2500 & under	2500 & under