

Millennium's End RPG Optional Rules

Controllability of Rapid/Auto-fire Weapons

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Introduction, How this rule was born

After much arguing and lamenting, after many, many, many (many, many, many¹) rounds of ammunition, and after some impromptu surveys and field tests, have I come to the conclusions in which I have used for this rules variant. It came to my attention that not all weapons are created equal. This is a very easy conclusion for anyone that has had the pleasure of shooting many types and varieties. Even with this very evident fact, Millennium's End rules state, "Assess a -20 penalty whenever a character rapid-fires, to all but the first roll in a sequence,"² and "for auto-fire weapons,... the penalty is -30."³ Statistically, this states that Millennium's End treats all weapons the same when it comes to ergonomics, recoil, feel, etc. All of these traits are fairly subjective, but there is no doubt that particular weapons are especially well suited (by design or accident) for accuracy and handling while in automatic fire. There is no doubt that particular weapons are unwieldy while in automatic fire. This set of rules will help portray this attribute to weapons.

Data, The results of impromptu field surveys

Below is a set of data used to assist me in creating these rules. These weapons were rated by males and females, tall and short, and left handed and right handed shooters. All participating shooters were experienced with automatic weapons. Ratings ranged from 1 to 10, with a rating of 5 being considered "average." It should be noted that this data is the result of a survey, so this data is subjective, and the opinions of the shooters. The colors show where the general group rated each particular weapon. With 29 people firing each weapon, groupings opinions of five to nine resulted in a Yellow designation and ten or more votes resulted in Green.

¹ Many, many, many, many, many, many, and many

² 012-000, Millennium's End Rulebook v2.0 (2nd Printing), page 97, Rapid-Fire Rule

³ 012-000, Millennium's End Rulebook v2.0 (2nd Printing), page 97, Auto-Fire Rule

<u>Caliber</u>	<u>Name</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
11.43 x23	Ingram M10	3	8	14	3	1					
5.45 x39	AK74		3	8	11	5	1				
5.56 x45	Colt AR-15 Carbine		1	2	9	7	5	5			
5.56 x45	Colt M16A1			2	8	9	8		1	1	
5.56 x45	HK 33					9	10	8	2		
5.56 x45	SIG 551				3	7	9	6	3	1	
5.56 x45	Steyr AUG			1	4	12	9	3			
7.62 x39	AKM		1	15	10	2					
7.62 x51	FN FAL			2	13	12		1	1		
9 x19	Beretta 93R		16	12	1						
9 x19	Colt 635					1	5	13	10		
9 x19	Glock 18	1	17	9	2						
9 x19	Glock 18C		4	13	12						
9 x19	HK MP5A2						6	12	9		2
9 x19	HK MP5KA5			1	6	11	10		1		
9 x19	HK VP70M			3	9	9	8				
9 x19	IMI Mini-Uzi			8	10	9	2				
9 x19	Steyr AUG						7	13	8		1
9 x19	Tec-9	2	17	10							

Because all results are subjective, some particular notes should be made.

1. Small submachineguns (HK MP5K) with little distance between the fore and trigger vertical grips tended to fair poorly with left-handed shooters. Their right arm would be in the path of hot brass as their right hand grasped the fore grip.
2. Taller shooters prefer adjustable/collapsible stocks versus fixed stocks. Reasons given were that adjustable stock could be extended slightly further than the optional fixed stock. Fixed stocks can be extended with padded butt plates.
3. Comfort with a particular weapon results from practice. Even after firing a few bursts, accuracy improves due to personal adjustments in stance and compensating for recoil, muzzle rise, etc.
4. Viet Nam veterans tended to rate the M16A1 higher than other shooters. This has been attributed to familiarity and comfort level with the weapon.

Rules Alterations

The chart above clearly shows two things. The first, as pointed out by Robert Thomas, is that weapon comfort and controllability is a very personal thing. No data listed above clearly shows something definitive. The second, as I prefer to point out, is that weapon opinions do form a particular consensus of results. Opinions may vary, but superiority of particular weapons (or even inferiority) clearly result when compared to one another.

Most weapons will have a controllability modifier of 0 (zero). In the above chart, weapons that fall at numbers four, five, and six, should have a zero modifier. Weapons with better controllability would have a modifier of +5, cumulative with the -20/-30 modifiers for rapid-fire and auto-fire. Exceptional weapons would have a +10 modifier. Weapons that have poor controllability have a modifier of -5. Exceptionally poor and uncontrollable weapons would have a modifier of -10. Remember that these modifiers are cumulative with the -20/-30 rapid-fire and auto-fire modifiers only.

Because familiarity with a particular weapon greatly affects the users accuracy, any unfamiliar weapon that is picked up in battle should start with a -5 modifier. Each consecutive pull of the trigger reduces this penalty by one point. After five pulls of the trigger, the user will have become familiar enough with the weapon's recoil, sights, etc. This only counts for weapons that the user has never fired before.

Examples of the Applied Attribute

<u>Caliber</u>	<u>Name</u>	<u>Control</u>
11.43 x23	Ingram M10	-10/-5
5.45 x39	AK74	-5/0
5.56 x45	Colt AR-15 Carbine	0
5.56 x45	Colt M16A1	0
5.56 x45	HK 33	0/+5
5.56 x45	SIG 551	0/+5
5.56 x45	Steyr AUG	0
5.7 x28	FN P90	+5/+10
7.62 x39	AKM	-5
7.62 x51	FN FAL	-5/0
9 x19	Beretta 93R	-10
9 x19	Colt 635	+5
9 x19	Glock 18	-10/-5
9 x19	Glock 18C	-5
9 x19	HK MP5A2	+5
9 x19	HK MP5KA5	0
9 x19	HK VP70M	0
9 x19	IMI Mini-Uzi	0/-5
9 x19	Steyr AUG	+5
9 x19	Steyr TMP	0
9 x19	Tec-9	-10/-5

Please note that controllability is very subjective. To the left is a collection of attributes that cover a good variety of weapons. You should be able to guess-timate controllability figures for other weapons not on the list.

Controllability of automatic pistols should all be around 0 (zero) except for overly developed weapons. Stipulation only, the FN Five-seveN (without the benefit of firing the weapon) is supposed to have very little recoil that would benefit from a +5 modifier for controllability.