

METRA Metropolitan Rocketry Association Tripoli North Jersey #94

# **Membership Application and Renewal Form**

METRA Membership runs per calendar year, January 1 – December 31

# \*\*\*\* Please send copy(s) of your TRA &/or NAR card(s) with this application \*\*\*\*

First Name:				M.I.:		D.O.B.	/	/
Last Name:								
Address:								
City:								
State:				Zip (	Code:			
Home Phone:	(	)						
Cell / Mobile:	(	)						
E-mail Address:								
TRA#:			Exp. Date:	/ /	C	ert. Leve	el:	
NAR#:			Exp. Date:	/ /	C	ert. Leve	el:	

# **Additional Family Memberships**

First Name	Last Name	Date of Birth	
		/ /	
		/ /	
		/ /	

# Membership Type and Fees

Membership Type	Fee	Total
Senior Member (18 & over)	\$ 30.00	\$
Junior Member (non-voting & under 18)	\$ 10.00	\$
	TOTAL:	\$

# Payment Method (please check the apporpiate box):

Paypal on metrarocketclub.org

CASH on the field

A check made payable to "Metropolitan Rocketry Association" and mailed to : METRA c/o Andrew Cook, 50 Gerald St., Wading River, NY 11792

You must read and complete at end of this form. Your signature, in the designated area(s), and a copy of your current TRA / NAR card are required, in order to have this membership application accepted for processing

### METROPOLITAN ROCKETRY ASSOCIATION (METRA) LIABILITY WAIVER, SAFETY CODE AND RISK DISCLOSURE

## TO FLY AT A METRA ROCKET LAUNCH YOU MUST READ THE FOLLOWING AND SIGN AT THE LAST PAGE

1) By signing this safety code and liability waiver, I hereby attest that I have read and understand the Rocketry Safety Code, and rules that will apply to this launch.

2) I understand that the following risks exist, and that other unforeseen risks can and will sometimes occur.

3) Some of the risks are bodily injury, death from impact to the participants' body, burns, etc.

4) I also agree to report any violations of the Rocketry Safety Code or any unsafe condition to the launch officials.

5) METRA launches are held under the rules of Tripoli Rocketry Association (TRA). You must hold the required high power rocketry certification from either TRA or NAR to use and fly rockets using H or higher impulse motors. All flyers and vendors must obtain and/or use rocket motors in compliance with Federal, State and Municipal laws, codes, rules and regulations. All flyers and vendors shall be solely responsible for compliance with all Federal, State and Municipal laws, codes, rules and regulations. All flyers and vendors will indemnify and hold harmless the Metropolitan Rocketry Association and it's officers from and against any loss, expense, damage or injury caused or occasioned directly or indirectly by their failure to comply with the provisions of the said laws, codes, ordinances, rules, regulations and requirements. I also agree to indemnify and hold harmless the Metropolitan Rocketry Association and or actions at this rocket launch. This also includes any bodily injury that I or my guest might incur.

6) The following is a condensed version of the Tripoli Rocketry Association ROCKETRY SAFETY CODE.

7) Only a person who is a certified flyer shall operate or fly a high power rocket.

8) Must comply with United States Code 1348, "Airspace Control and Facilities," Federal Aviation Act of 1958 and other applicable federal, state and local laws, rules, regulations, statutes, and ordinances.

9) A person shall fly a rocket only if it has been inspected and approved for flight by a Range Safety Officer (RSO) for compliance with the applicable provisions of this code.

**10)** Do not dismantle, reload, or alter a disposable or expendable rocket motor, do not alter the components of a reloadable rocket motor or use the contents of a reloadable rocket motor reloading kit for a purpose other than that specified by the manufacturer in the rocket motor or reloading kit instructions.

11) A rocket shall be constructed to withstand the operating stresses and retain structural integrity under conditions expected or known to be encountered in flight.

**12)** A rocket vehicle is intended to be propelled by one or more high power solid propellant rocket motor(s) shall be constructed using lightweight materials such as paper, wood, plastic, fiberglass, or, when necessary, ductile metal so that the rocket conforms to the other requirements of this code.

**13)** A person intending to operate a rocket shall determine its stability before flight, providing documentation of the location of the center of pressure and the center of gravity of the rocket to the RSO, if requested.

#### 14) Launch Site

- a) Launch a rocket only in an outdoor area where tall trees, power lines, and buildings will not present a hazard to the safe flight operation of a high power rocket in the opinion of the RSO.
- b) Do not locate a launcher closer to the edge of the flying field (launch site) than one half the radius of the expected altitude of the rocket.

### 15) Launcher Location

a) Locate the launcher a reasonable and safe distance away from any occupied building(s).

**b**) Ensure that the ground for a radius of 10 feet around the launcher is clear of brown grass, dry weeds, or any other easy-to-burn materials that could be ignited during launch by the exhaust of the rocket motor.

#### 16) Safe Distance

a) No person shall be closer to the launch of a high power rocket than the person actually launching the rocket and those authorized by the RSO.

b) All spectators shall remain within an area determined by the RSO, behind the LCO, the person launching the rocket.

#### 17) Launch Operations

a) Do not ignite and launch a rocket horizontally, at a target, or so the rocket's flight path goes into clouds or beyond the boundaries of the flying field (launch site).

b) It is not recommended that a rocket be launched if the surface wind is more than twenty (20) miles per hour.

c) Do not operate a rocket in a manner that is hazardous to aircraft.

#### 18) Launch Control

a) A rocket will only be launched by and with immediate knowledge, permission, and attention of the Launch Control Officer, (LCO).

b) All persons in the launching, spectator, and parking areas during a countdown and launch shall be standing and facing the launcher if requested to do so by the Safety Monitor.

c) Precede the launch with a five (5) second countdown audible throughout the launching, spectator, and parking areas. This countdown shall be given by the person launching the rocket, the RSO, Launch Control Officer (LCO), or other flying site operating personnel.

d) Do not approach a rocket that has misfired until the safety interlock has been removed or the battery has been disconnected from the ignition system, one minute has passed, and the LCO or the RSO has given permission for only a single person to approach the misfired rocket to inspect it.

### 19) Weight and Power Limits

a) Ensure that the rocket weighs less than the rocket motor manufacturer's recommended maximum liftoff weight for the rocket motor(s) used for the flight. During pre-flight inspection, the RSO may request documentary proof of compliance.

b) Do not install a rocket motor or combination of rocket motors that will exceed the structural and performance limitations of the rocket.

#### 20) <u>Recovery</u>

a) Fly a rocket only if it contains a recovery system that will return all parts of it safely to the ground so that it may be flown again.

**b)** Install only flame resistant recovery wadding if wadding is required by the design of the rocket.

c) Do not attempt to catch a rocket as it approaches the ground.

d) Do not attempt to retrieve a rocket from a place that is hazardous to people.

#### 21) Payloads

a) Do not install or incorporate in a rocket a payload that is intended to be flammable, explosive, or cause harm.

**b)** Do not fly any animal in a rocket.

#### 22) Launching Devices

a) Launch from a stable device that provides rigid guidance until the rocket has reached a speed adequate to ensure a safe flight path.

- b) Incorporate a jet deflector device if necessary to prevent the rocket motor exhaust from impinging directly on flammable materials.
- c) A launching device shall not be capable of launching a rocket at an angle more than 20 degrees from vertical.

d) Place the end of the launch rod or rail above eye level or cap it to prevent accidental eye injury. Store the launch rod or rail so it is capped, cased, or left in a condition where it cannot cause injury.

#### 23) Ignition Systems

a) Use an ignition system that is remotely controlled, electrically operated, and contains a launching switch that will return to "off" when released.

**b)** The ignition system shall contain a removable safety interlock device in series with the launch switch.

c) The launch system and igniter combination shall be designed, installed and operated so the liftoff of the rocket shall occur within three (3) seconds of actuation of the launch system. If the rocket is propelled by a cluster of rocket motors designed to be ignited simultaneously, install an ignition scheme that has either been previously tested or has a demonstrated capability of igniting all rocket motors intended for launch ignition with one (1) second following ignition system activation.

d) Install an ignition device in a rocket motor only at the launch site and at the last practical moment before the rocket is placed on the launcher.

# **I THE UNDERSIGNED:**

A. Understand the aforementioned risks and safety procedures.

B. Will at all times conduct ourselves in accordance with these rules and procedures, and will exercise the utmost care, attention and prudence.

C. Acknowledge that other potential risks exist, which may not be mentioned above, and that even by observing these rules there still exists the risk of property damage, injury or death from rocketry.

D. Assume all risk of property damage, injury or death.

E. Agree to make no claim against METRA, its Officers, Board of Directors or the Landowner.

F. Acknowledge that METRA, it's Officers, Board of Directors or the Landowner is not liable for the failure of the participants or guests to abide by these safety codes, rules and regulations.

SIGNATURE:	PRI	NT NAME:
TRA Number:	Expiration Date:	Cert. Level:
NAR Number:	Expiration Date:	Cert. Level:

You must hold the required TRA or NAR "High Power Rocketry" certification in order to use and fly rocket motors of "H" or higher impulse!

### Adult/Parent name and signature is required for flyers under eighteen years of age.

ADULT/PARENT NAME:	ADULT/PARENT SIGNATURE:	
Street:	1. Child Name:	Age:
City, State, Zip:	2.Child Name:	Age:
Phone Number: ()	3. Child Name:	Age:
Email Address:	4. Child Name:	Age:

You must read and complete at end of this form. Your signature, in the designated area(s), and a copy of your current TRA / NAR card are required, in order to have this membership application accepted for processing