

Check It Out!

Introduction to Hang Gliding
Brought to you by
Rochester Area Fliers
Hang Gliding School

Check It Out Time Schedule

<u>Time</u>	<u>Topic</u>
12:00 – 1:00	check In (Membership form, Signed Waiver and Paid)
1:00 – 2:00	Class Room Instruction: Welcome – Schedule Club Overview US Hang Gliding & Paragliding Association, USHPA How do you control a hang glider Hang Gliding Equipment Cost Site Protocol and Safety
2:00 – 4:00	Hands On Instruction: Picking up and holding a hang glider Ground Handling Running with a hang glider – Launching Stopping a hang glider – Flaring Theory of flight

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Club Overview

- Local Club called Rochester Area Flyers, RAF, established in 1983
- Board of Directors, BOD – Member Positions: President, Secretary, Training Coordinator, Site Coordinator, Safety Coordinate, Insurance Coordinator, Director of Publicity, and Web master
- RAF member pay yearly dues, \$60.
 - Dues help pay for clubs expenses such as site maintenance and site insurance.
 - 50-60 full members a year.
 - Club offers 3 day membership for visiting pilots.
 - Members are a combination of local and out area pilots.
- BOD member meet monthly except during summer months.
- Club crated training program to keep club viable
 - Training program has 5 USPHA certified instructors
 - Provide equipment for training, glider, harness and helmet.
 - Ground school
 - Training is held 1 per year
 - Training starts April 27 ends June 29
 - Weather dependent, Wind direction, high winds and rain.

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US Hang Gliding and Paragliding Association (USHPA)

- United States Hang Glide and Paragliding Association, USHPA, is a private organization
- USHPA members are voted to server on the BOD for each of the 12 regions
 - ✓ Made up of 4 elected executive Committee members and 24 Regional directors.
 - ✓ There are 12 regional territories in the US.
 - ✓ RAF is in the north Eastern region - Region 12
 - ✓ Paul Vought is our regional director
- Purpose is to provide:
 - ✓ Pilot Rating program
 - ✓ Training material and guidelines
 - ✓ Instructor certifications
 - ✓ Certifications for tandem flight and aero towing
 - ✓ Site insurance coverage
 - ✓ Publishes a national magazine
 - ✓ Provide third party and participant liability insurance coverage for all members

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How a Hang Glider is Controlled

- Hang glider are launched by
 - foot down a slope into the wind
 - Arrow Towed behind specially equipped ultra-light, also known as a tug.
 - Winch Towed.
- Pilot shifts weight to control pitch and role.
 - Pitch control speed of glider
 - Role control turning left and right.
- Pilot hangs from straps connected to the Center Gravity, CG of the glider.
- Pilot uses control bar (base bar) to control the gliders pitch and role.

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Hang Gliding Equipment

What you need to get started

- There are many high tech gadgets for hang gliding but the essential items needed to get started are:
 1. Glider
 2. Harness
 3. Helmet
 4. Parachute
 5. Wheels

Hang Glider

- Hang glider manufacturers market different models for the different skill levels
 - Beginner – Hang 1 through Hang 2
 - Intermediate – up to Hang 3
 - Advanced – for Hang 3 and Hang 4
- Each hang glider model comes in various sizes measured in square feet to accommodate a wide range of pilot hook-in weights
- All gliders are certified before being placed on the market
- The sail is made of stabilized Dacron
- The airframe is made from aircraft-grade hardware, aluminum tubing, machined parts, stainless steel cables and in some case carbon fiber
- Tube diameter and wall thickness for the frame is based on the load it will be handling.
- Parts of a Hang Glider: Control Frame, Down tubes, Control(base) bar, leading edge, keel, King post, batons rigging (cables), Hang Straps, Center of Gravity.

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Harnesses

- There are 4 different types of harnesses
 1. Apron
 2. Spaghetti
 3. Cocoon
 4. Pod (Most popular)

Helmets

- Helms must be worn at all time during flight.
- Protect from head injuries
- Helmets made specifically for Hang gliding
- Different style of helmets

Wheels

- Wheels help glider role on the ground
 - Many sizes and style
- Considered safety equipment for landing
- Not required but strongly recommended

Parachutes

- Parachutes are required for flying any mountain site
- Parachutes are deployed manually (by hand)
- Parachutes are sized according to combined weight of glider and hook-in weight of pilot
- Parachutes are used only when a catastrophic failure has occurred during flight (i.e. structural failure)

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Instruments (Optional)

- Hang glider pilots may use a combination of instruments and equipment to assist them in their flying. This may include:
 - ✓ Variometer
 - ✓ Altimeter
 - ✓ Airspeed indicator
 - ✓ Instrument deck
 - ✓ 2 meter or FM radios

Roof Racks

- Used to safely transport gliders on top of a vehicle
- Pilots make their own glider racks to fit vehicle
- Used wide straps to tier down glider
- Foam pads used for cushions
- Minimum of 3 support as rule.

What does it Cost

New

- Hang Glider - \$3,600 up to \$12,000
- Gear - \$3,000 up to \$6,000

Used

- Hang Glider - \$1,500 to \$4,500
- Gear - \$600 up to \$2,500

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Site Protocol and Safety

- To yourself and your family
 - ✓ Watch out for others
 - ✓ Ask for help
 - ✓ Flag down an instructor if you see something unsafe
 - ✓ Insurance issues
 - ✓ Drugs and Alcohol will not be tolerated
 - ✓ Don't show off

- To the club and school
 - ✓ All flying sites are sensitive. Do nothing to put them in jeopardy
 - ✓ Be active in improving our image

- To the landowners
 - ✓ Respect the landowners' property
 - ✓ Leave no litter - Pick up other people's garbage
 - ✓ Drive responsibly

- To the general public
 - ✓ Be polite and accommodating
 - ✓ Keep onlookers and you safe at the site