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July, 2016



# **Next Meeting**



July 27, 2016 6:30pm At Black Bear Diner Food Available Come early to visit and eat!

# By Bob Ingram

### July

Appreciate the contribution of pictures and articles that I have been getting ... so continue to feel free to submit pictures and stories during 2016. Without your contributions the BAM Newsletter would not exist at the level you expect it.

Remember the Editor can't be everywhere but someone is usually there to report that CRASH (take pictures, and tell who made it happen) or some other event.

Sometimes there are too many articles, so don't be discouraged, they will appear in future issues.

This issue is a rather long issue due to many activities ... catch up on field improvements (picture on cover— new storage, handicap toilet, pit area covering, extra landing strip along side runway—all added to what previously had been done to improve Popp's (BAM) flying field, and float fly with FOD



## A little story from the BAM Family BBQ

At the Family BBQ and Scale Fun Fly on Saturday, July 9, Bill Hand armed his recently acquired Cessna foamie equipped with the new-fangled "SAFE" system. He orientated the aircraft on the runway centerline to coordinate the internal GPS (so it would land where it took off).

Bill preformed a 'short' takeoff and circled the field several times evaluating the flight characteristics of the "SAFE" system. With the aircraft headed in a westerly direction, Bill found he didn't have adequate control to turn the aircraft 180 degrees back towards the runway. As the plane started a sweeping left turn it slowly descended. Bill still didn't have adequate control!

"Look out for the trees" came cries from the pits, then the plane disappeared. A search party was quickly summoned and the plane was found perched in the 'soft' upper branches of a tall Juniper westerly of the field.

"I can get it" explained Bill as Dave Reiss gave him a boost to reach the lowest branch. Bill was able to climb half way, shook the tree violently to loosen the aircraft, but to no avail. He called for and was handed a long stick to which he poked and prodded the plane until it came loose and fluttered into the waiting hands of Tom Rose. The plane was unscathed except for a loose stabilizer and slightly misaligned wing. Bill vows to return at a later date with his Cessna (and maybe a chainsaw?).

### Welcome to BAM

Let's give a **BIG WELCOME** to our latest new BAM member— Dennis McMahon



Dennis grew up a bunch of years ago in Klamath Falls, graduated from Southern Oregon College with a Business degree and spent 30 years in the Air Force in the intercontinental ballistic missile business in Wyoming, Montana, Missouri, Nebraska and California. Dennis served a short tour in '95 as Base Commander in southern Italy supporting Navy Seals, Air Force Pararescue and Army Rangers performing Special Operations missions. The unit flew AC-130 Spectre Gunships and MH-53J

Pave Low Gunship Helicopters, "servicing" targets in the Bosnia conflict. Retired from the Air Force and moved to Bend in 1996, currently doing volunteer work and serving as president of the Central Oregon Chapter of the Military Officers Association of America.

Dennis started his RC flying career by flying U-Control as a kid and was always intrigued by RC aircraft, finally around 1975 got a 4-channel digital proportional MRC transmitter and built an Ugly Stick-type kit but installed P-51-looking elevator, rudder, and wingtips. Ended up being too busy on the job to really pursue the hobby so he sold out in about '78. Now he has a Tactic TTX404 and a Spektrum DX6i along with a Calypso electric sailplane (I've had to replace a couple scrunched fuselages), a micro T-28, and an Apprentice he hasn't thrown together yet. Dennis says he is a rank beginner and is looking forward to some instruction. Dennis drove out and looked at Popp's Field before he joined and was really impressed with it. It's obvious that BAM is a topnotch club, judging from the excellence of the field.

Welcome to BAM ... all of us look forward to seeing you and your planes at Popp's Field.

## Popp's Field improvement

Improvements continue at Popp's Field ... so far you have only seen a couple of pictures that show the improvement at Popp's Field ... with this issue we hope to bring everyone up-to-date on the status of Popp's Field with more pictures and information. First up is the crew that made it all happen.



Now that you know who did the work ... let's take a look at what was accomplished ...

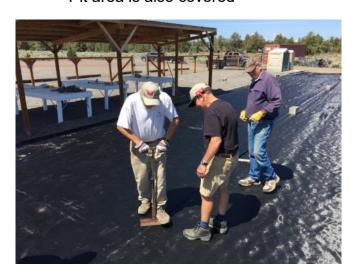
First they remove the old covering ...



Start the roll out of the new covering ....



Pit area is also covered



Then they prepared the surface ...



Secured it down with staples ...



And secured to the taxiway



5

## Don't forget the helicopter, quad/drone pad ...



And the little landing strip along the runway  $\dots$ 

### R. Carlson cleaning runway of debris







AND add the final touch of a NEW wind sox to top it all off  $\dots$ 



# **Show & Tell**

John Putnam brought in his boned up 1940 Buzzard Bombshell. John is doing a wonderful job building this aircraft and converting it to RC. The Bombshell is a free flight aircraft from the early days of model aviation. In fact, Joe Konefes' Buzzard Bombshell set a free flight record of 49 minutes on its first flight. A slight issue with the entrance door will cause John a bit more work before covering but this should be a great flying aircraft.



Tom Schramm brought in his most recent project. A 62" wingspan Pilatus Porter PC-6 by VQ (Vinhquang) models of Viet Nam. The Porter is balsa and plywood built up ARF for either electric or nitro power—.46 size. The fuselage is 46" and weighs about 5 pounds, using 5 channels. The covering is a sticky back preprinted Mylar material with a whimsical parrot color scheme with panel lines and rivets. The landing gear are shock absorbing. Tom chose to power his Pilatus with an inverted OS .52 four stroke motor with a remote Crane Engr'g glow driver and will rely on his Futaba radio for control. Tom faced some issues (poorly written instructions / warp in wings / misalignment of holes in wing root rib / fin base needed to be modified to fit in stab slot / several joints were sparse on glue / firewall required additional bracing / replaced furnished CA hinges with Robart hinges / replace most of the hardware with better quality / servo mounting cutouts needed enlarging and reinforcing for standard size servos) in the construction of the plane as it typical with most ARF designs but it should fly nicely. Tom



is looking forward to the maiden flight of this "bird".

# **Crash Trophy**

There were a number of incidents (candidates) for the 'Crash Trophy' ... upon discussion (debate—it seems many members were vying for the opportunity take this trophy home—and let's just say that the local hobby shop futures are looking up) and vote the Crash Trophy for the June 2016 meeting was awarded to Andy Neidzwiecke for his spectacular pirouette maneuver on take off with his Twin-Star. Andy was not present to take home the 'Crash Trophy' that he won. Remember you could be eligible to win at the July 2016 meeting.



# **Float Fly**

A few BAM members (Tom Rainwater, James Fredericks, Dave Reiss, Tom Schramm, Bob Ingram) joined our fellow flyers from Redmond Field of Dreams in a Float Fly at Hay Stack Reservoir. There were about 12 pilots with many planes and all had fun. This could be an annual event. The next time it is held come and join in on the fun. You do not have to fly. It is just a lot of fun to watch too.





























### The Historic Flight Foundation Collection

Flyable WWII aircraft you can see in the air all summer long.

Jon Putnam

The Northwest is blessed with many great airplane museums including those in Madras, Hood River, McMinnville, Vancouver, Olympia, Port Townsend, Seattle and Everett. In January of 2015 I visited Paul Allen's Flying Heritage Collection (FHC) at Paine field in Everett (flyingheritage.com). A month ago I was lucky enough to pay FHC a second visit and see its incredibly well restored and valuable collection of German, Japanese, Russian, British and American aircraft. This time I also visited the Historic Flight Foundation (www.historicflight.org) on the other side of Paine Field. For my story on FHC, check out BAM's archives, January 2015.

### The Historic Flight Foundation (HFF)

After spending the morning at the FHC, a docent happened to say, "Are you aware of the collection on the other side of Paine Field?" I had three hours before I promised to pick up my wife, so off I went. As I approached the HFF site on the Mukilteo Speedway, a Spitfire crossed above the lanes of traffic approaching for a landing. A good sign I thought. I was not let down though it is far smaller than the FHC.

Historic Flight was established in 2003 and includes mainly US planes both vintage and military. Vintage includes this red TravelAir 4000 with a radial engine. Lovely?





Another really unusual part of the collection is this replica of a Granville Brothers Gee Bee. The original was built in 1934 to compete in the MacRobertson Air Race from England to Australia. A gorgeous, potent looking plane, it was also, like most Gee Bee aircraft, a tricky plane to fly, making me wonder why anyone would aspire to build a replica of it





This Waco UPF-7 inside, and a red Beech Stagerwing outside on the tarmac rounded out most of the vintage collection.





But, outside is what interested me most about the HFF, US Navy fighters.



When I see this Chance-Vought Corsair (this example was built by Goodyear) I immediately think of Pappy Boyington and the Marines shooting up some island in the Pacific. "Robust" does do this massive plane justice. And when the Corsair, Tiger Cat or Bear Cat we are about to look at are viewed alongside planes they was designed to fight such as this Oscar at the Flying Heritage Collection you can truly see the advantage American pilots had. Its like a heavy weight boxer taking on a welterweight.



If you don't like gull wing gunslingers like the Corsair, the twin-engine Grumman F7F Tigercat or F8F Bearcat (a version of it holds the land speed record for prop planes) may be more to your liking. Historic Flight has both and they look absolutely huge sitting out on the runway. Both were designed to fend off the Japanese Kamikaze. The Tiger Cat was designed for long range patrols in front of the fleet to intercept Kamikaze before they could reach the fleet and the Bearcat was designed to intercept them at altitude. Neither plane saw service in WWII but both were used in the Korean Conflict.





Some think the Bearcat was based on a captured version of the Focke-Wulf 190 and the resemblance is striking.

Not quite in the Bearcat category but widely used as a WWII trainer is this colorful North American T-28 Texan. On all of these planes you can see the absolutely great condition they are in.



Another star of the tarmac is this B-25 bomber, which I happened to see a year ago when it flew to the Bend airport.



For me, another highlight of HFF was this Spitfire, the same one that had buzzed my car on the freeway. A staff member working on it said that it was restored in the UK at a cost of \$2.4 million. Some guys have money?



The last plane I'll talk about is this P-51B Merlin-engined razor back Mustang, the "Impatient Virgin.". I was lucky to have the docent allow me to witness the pilot fire it up for a test flight, the loud "wumpf", "wumpf" of its cylinders kicking over like a small howitzer.



That is just a sampling of this very nice collection. If you like planes, you can visit both the Flying Heritage and the Historic Flight collections in one day and seee the planes flying at events during the Summer. Here is the upcoming calendar of events. More information at their websites.





### Join Us for Our

## ~ 7th Annual ~ Trip to the Good 'ol Days

This gathering is all about getting back to the roots of radio control.

Entries can be brand new as long as the original, basic <u>model</u> design dates back to 1980 or earlier. Planes can be scaled up or down if you wish. There are even some current ARFs that are vintage. Not sure if your plane qualifies? Email

## Vintage R/C Society

# Northwest Fly-In

September 2 and 3, 2016

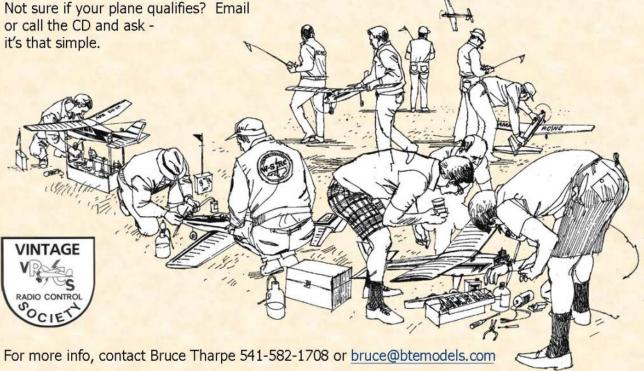
~ Friday and Saturday ~

Agate Field, Medford, OR

~ Home of the Rogue Eagles ~

OPEN FLYING FOR R/C MODELS THAT WERE DESIGNED, PUBLISHED. KITTED. OR FLOWN IN 1980 OR EARLIER.

Free Registration! Bring as Many Models as You Like
Free Coffee, Donuts, Snacks, and Sodas
Free Pilots Only Raffle - Earn Tickets by Flying
Awards & Prizes for Pilot's Choice & Vintage Spirit
SAM R/C Assist Models are Welcome
No Competition, Just Open Flying
Dry Camping Available at Field, Bring Your RV
Visit www.rogue-eagles.org for Directions



# June 2016 Club Meeting

Although the June meeting was lightly attended and not a lot on the agenda, there was discussion / debate on the crash trophy and everyone had a good visit ... good food ... good time.









## What else is happening

### Bend Aero Modelers - 2016 Event Calendar



	January										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
1						1	2				
2	3	4	5	6	7	8	9				
3	10	11	12	13	14	15	16				
4	17	18	19	20	21	22	23				
5	24/31	25	26	27	28	29	30				

				-
January	1st-	New	Year's	Day

			Febr	uary			
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
6		1	2	3	4	5	6
7	7	8	9	10	11	12	13
8	14	15	16	17	18	19	20
9	21	22	23	24	25	26	27
10	28	29					

				uary			
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
6		1	2	3	4	5	6
7	7	8	9	10	11	12	13
8	14	15	16	17	18	19	20
9	21	22	23	24	25	26	27
10	28	29					

March									
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat		
10			1	2	3	4	5		
11	6	7	8	9	10	11	12		
12	13	14	15	16	17	18	19		
13	20	21	22	23	24	25	26		
14	27	28	29	30	31				

April										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
14						1	2			
15	3	4	5	6	7	8	9			
16	10	11	12	13	14	15	16			
17	17	18	19	20	21	22	23			
18	24	25	26	27	28	29	30			

April 5th - Easter Day

May										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
18	1	2	3	4	5	6	7			
19	8	9	10	11	12	13	14			
20	15	16	17	18	19	20	21			
21	22	23	24	25	26	27	28			
22/23	29	30	31							

May 10th - Mother's Day / May 25th - Memorial Day

June										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
23				1	2	3	4			
24	5	6	7	8	9	10	11			
25	12	13	14	15	16	17				
26	19	20	21	22	23	24	25			
27	26	27	28	29	30					

September

Fri

 Sat

Sun Mon Tue Wed Thu

June 21st - Father's Day

Week 

July									
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat		
27						1	2		
28	3	4	5	6	7	8	9		
29	10	11	12	13	14	15	16		
30	17	18	19	20	21	22			
31	24/31	25	26	27	28	29	30		

July 4th - Independence Day

August										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
31		1	2	3	4	5	6			
32	7	8	9	10	11	12	13			
33	14	15	16	17	18	19	20			
34	21	22	23	24	25	26				
35/36	28	29	30	31						

Septem	ber 7	7th -	Labor	Day

October										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
40							1			
41	2	3	4	5	6	7	8			
42	9	10	11	12	13	14	15			
43	16	17	18	19	20	21	22			
44	23/30	24/31	25	26	27	28	29			

November											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
45			1	2	3	4	5				
46	6	7	8	9	10	11	12				
47	13	14	15	16	17	18	19				
48	20	21	22	23	24	25	26				
49	27	28	29	30							

November 24th - Thanksgiving Day NOTE: Due to Thanksgiving the November meeting is a week earlier.

December										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
49					1	2	8			
50	4	5	6	7	8	9	10			
51	11	12	13	14	15	16	17			
52	18	19	20	21	22	23	24			
53	25	26	27	28	29	30	31			

December 24th - Christmas Eve December 25th - Christmas Day December 31st - New year's Eve January 1st - New Year's Day



## **Bend Aero Modelers**



Bend, Oregon | AMA District XI

### Field Safety Guidelines

#### A. GENERAL

- All pilots shall be current members of AMA. Proof of current AMA membership is required prior to flying at BAM.
- Visiting AMA pilots and new members of BAM shall receive a safety orientation by one of BAM's members prior to their first flight.
- Pilots shall ensure flight operations in accordance with AMA's Safety Code and these Field Safety Guidelines at all times.
- Pilots are responsible for the safe operation of their aircraft at all times.
- All guests, spectators, children, and pets shall be supervised by a BAM member at all times while inside the flying field (fenced area) and are encouraged to remain behind the pit tables.
- Pilots shall always secure/restrain running or armed aircraft.
- R/C cars and other surface vehicles are prohibited anywhere inside the flying field (fenced area) during active flight operation.
- Smoking is prohibited anywhere inside the flying field (fenced area).
- The consumption of alcoholic beverages before or during flight is prohibited.

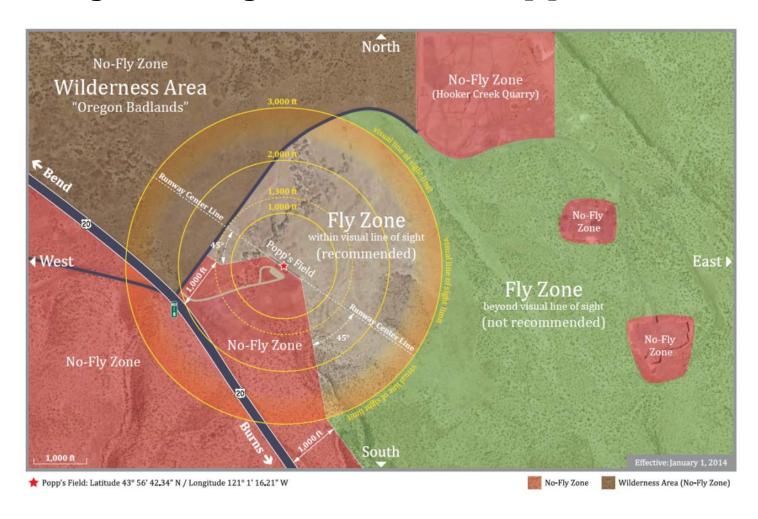
### B. PRE-FLIGHT OPERATION

- Pilots that use AM/FM radio equipment (50 MHz, 53 MHz, and 72 MHz) shall possess the appropriate frequency pin.
- Pilots shall place their AMA card on the respective channel pin on the frequency board. This does not apply to pilots using 2.4 GHz transmitters.
- 3. Pilots shall not start/run their aircraft in the pit area.
- For extended engine tuning and troubleshooting procedures (e.g., more than usually needed to start the engine), pilots shall use the marked areas designated for tune-ups, break-in and troubleshooting.
- Pilots shall never leave their aircraft unattended while the aircraft is running or armed even if it is secured and restrained.

#### C. FLIGHT OPERATION

- Pilots shall only taxi aircraft on the taxiways and runway. No taxiing is permitted in the pit area.
- While flying, pilots must remain behind the safety fence.
- Pilots shall verbally communicate their intentions during takeoffs, landings, low passes, touch-and-gos, and emergencies.
- Pilots shall always fly their aircraft north of the centerline of the runway and remain within the approved fly zones (see fly zone map for details).
- 5. Only pilots and a supervised helper are permitted beyond the safety fence (e.g., to retrieve an aircraft).
- Landing aircraft have the right of way. Dead-stick landings shall be called as such and given immediate right of way.
- Aircraft shall not take off from the taxiways south of the safety fence.
- 8. Aircraft shall not land on the taxiways at any time.
- Pilots shall call all maiden flights prior to flight. All other aircraft shall be grounded until the maiden flight has been completed.

## Fly / No Fly Zone's for Popp's Field



### Academy of Model Aeronautics National Model Aircraft Safety Code

#### Effective January 1, 2014

- A. GENERAL: A model aircraft is a non-human-carrying aircraft capable of sustained flight in the atmosphere. It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and any additional rules specific to the flying site.
  - Model aircraft will not be flown:
    - (a) In a careless or reckless manner.
    - (b) At a location where model aircraft activities are prohibited.
  - Model aircraft pilots will:
    - (a) Yield the right of way to all human-carrying aircraft.
    - (b) See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D.)
    - (c) Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport without notifying the airport operator.
    - (d) Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
    - (e) Not exceed a takeoff weight, including fuel, of 55 pounds unless in compliance with the AMA Large Model Airplane program. (AMA Document 520-A.)
    - (f) Ensure the aircraft is identified with the name and address or AMA number of the owner on the inside or affixed to the outside of the model aircraft. (This does not apply to model aircraft flown indoors.)
    - (g) Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
    - (h) Not operate model aircraft while under the influence of alcohol or while using any drug that could adversely affect the pilot's ability to safely control the model.
    - (i) Not operate model aircraft carrying pyrotechnic devices that explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.

### Exceptions:

- Free Flight fuses or devices that burn producing smoke and are securely attached to the model aircraft during flight.
- Rocket motors (using solid propellant) up to a G-series size may be used provided they remain attached to the model during flight. Model rockets may
  be flown in accordance with the National Model Rocketry Safety Code but may not be launched from model aircraft.
- Officially designated AMA Air Show Teams (AST) are authorized to use devices and practices as defined within the Team AMA Program Document. (AMA Document #718.)
- (i) Not operate a turbine-powered aircraft, unless in compliance with the AMA turbine regulations. (AMA Document #510-A.)
- 3. Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
  - (a) The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
  - (b) An inexperienced pilot is assisted by an experienced pilot.
- When and where required by rule, helmets must be properly worn and fastened. They must be OSHA, DOT, ANSI, SNELL or NOCSAE approved or comply with comparable standards.

### B. RADIO CONTROL (RC)

- 1. All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
- A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
- 3. At all flying sites a safety line(s) must be established in front of which all flying takes place. (AMA Document #706.)
  - (a) Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
  - (b) At air shows or demonstrations, a straight safety line must be established.
  - (c) An area away from the safety line must be maintained for spectators.
  - (d) Intentional flying behind the safety line is prohibited.
- RC model aircraft must use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
- RC model aircraft will not knowingly operate within three (3) miles of any pre-existing flying site without a frequency-management agreement. (AMA Documents #922 and #923.)
- 6. With the exception of events flown under official AMA Competition Regulations, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flightline.
- 7. Under no circumstances may a pilot or other person touch an outdoor model aircraft in flight while it is still under power, except to divert it from striking an individual.
- 8. RC night flying requires a lighting system providing the pilot with a clear view of the model's attitude and orientation at all times. Hand-held illumination systems are inadequate for night flying operations.
- 9. The pilot of an RC model aircraft shall:
  - (a) Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
  - (b) Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.
  - (c) Fly using the assistance of autopilot or stabilization system only in accordance with the procedures outlined in AMA Document #560.

### C. FREE FLIGHT

- Must be at least 100 feet downwind of spectators and automobile parking when the model aircraft is launched.
- 2. Launch area must be clear of all individuals except mechanics, officials, and other fliers.
- 3. An effective device will be used to extinguish any fuse on the model aircraft after the fuse has completed its function.

#### D. CONTROL LINE

- 1. The complete control system (including the safety thong where applicable) must have an inspection and pull test prior to flying.
- The pull test will be in accordance with the current Competition Regulations for the applicable model aircraft category.
- . Model aircraft not fitting a specific category shall use those pull-test requirements as indicated for Control Line Precision Aerobatics.
- The flying area must be clear of all utility wires or poles and a model aircraft will not be flown closer than 50 feet to any above-ground electric utility lines.
- 5. The flying area must be clear of all nonessential participants and spectators before the engine is started.