



THE FLIGHT LINE

The Flight Line is the newsletter of the Menifee Valley Flyers, a non-profit club chartered by the State of California and by the Academy of Model Aeronautics, Charter # 1717. The mailing address is 26754 Tropicana Drive Sun City, CA 92585. <http://www.mvfclub.com>

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May, 2010

General Meeting



Pilots participating in our first, very successful annual “Warbirds Over Menifee” event proudly display their planes on the runway

May 15, 2010 GENERAL MEETING

Next Meeting: June 19

On what was to be another beautiful day at the field, President Ray Gould called the meeting to order at 10:05 with 19 members in attendance. In Matt Stein’s absence, Steve Welch gave the Treasurer’s report with no outstanding bills being due. It was noted that the Club received a grant of \$1000 from the AMA to be used as needed to support the club.

Membership Chairman Matthew Steelmon reported the Club is now up to 53 members, with several new applications pending. Our new members at this meeting were Doug, Glenn and Shawn. Welcome guys! Membership cards will now be given out at the general meetings. If you have not received your card please get in touch with Matthew.

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The AMA "Introductory Pilot Program" is in full swing. This program allows newcomers to fly under a club instructor for 60 days without incurring the cost of equipment or membership fees. Also, we have club instructors available for member flight instruction. If you're new to the hobby and the Club, or want some "how to" advice get in touch with Jeff, Matt, or Ray.

As of this writing, the Club hosted the "Warbirds over Menifee" with a wonderful turnout. We only had ten pilots, but lots of spectators. The sky was a buzz with all types of military aircraft. Check the website for more on this event.

A Swap Meet, the first for our club, has been scheduled for June 12th. So get your unwanted stuff that someone else wants, and come out and enjoy a day of bartering and friendship. The field will be closed for flying from 9am till 1pm. For more info, check out the flyer on our website.

Doug Medore, owner of AirLand Hobbies in San Jacinto, was our guest speaker, and newest member. Doug's store offers a range of electric and nitro products for the air or land enthusiast. Please visit all our supporting stores... They advertise in our newsletter, they donate the gifts you win in the raffles, and they send perspective members our way.

The meeting adjourned at 10:45am. Next months meeting will be June 19th.

Hanger Talk

From *NOTAM*, Lewis Jordan, Editor



Crashless Flying

Fly RC long enough and you will experience a crash. However, some pilots seem to crash often—too often. Let's explore some of the causes of crashes and perhaps minimize crash opportunities.

Split Second Delay Crashes: High speed creates high loads on the plane's control surfaces and servos, causing a possible split second delay of control after a stick input. A split second delay is all that is needed when your plane is in some maneuver heading toward that ground at 100 mph (147 feet per second). Point the transmitter antenna at the airplane you can create a cone of science at your receiver, which can cause a control response delay.

Pilot Orientation Crashes: Another cause of crashes is a non-mechanical one: pilot orientation. If you are low and fast and lose orientation, expect a crash. Have your airplane flying level or in an up attitude while flying close to the ground.

Distraction Crashes: Another non-mechanical cause: distraction. If you allow yourself to be distracted, even for just a couple of seconds, you're likely to crash. If you were stung by a bee, step on what you think could be a snake, or have another critter eating your pant leg, put your plane in a series of tight loops with full up elevator, then take care of your business and your airplane will still be there when you can tend to it again, not two miles down the range. This may be overly simplistic, but you get the general idea. All pilots get distracted sooner or later. Think out in advance what you

will do so your fingers will react when you do get distracted.

Aerobatic Crashes: Among the many maneuvers pilots enjoy, snap rolls are at the top of the list. Just be prepared for that fatal snap of a control surface during this maneuver. Pilots usually enter a snap full bore with full deflection on all control surfaces. This can load your airplane up to as much as 30 Gs, plus air drag loads. Inspect your airplane carefully after doing this violent maneuver.

Elevator Crashes: Let's spend some time with the elevator. This is the most important crash prevention control on your airplane. First, the elevator itself must be built from good material. Too hard and brittle is not good; too soft is not good either. In today's world, the high-quality ARFs take care of this. Use your best servo in the elevator. I don't like the standard servos on any function except the throttle.

Buy some good servos for your primary control surfaces. Next, use only strong, stiff rod linkages from servo to the control horn. Fiberglass rod systems are great for long runs. Strong, stiff wire works well for short runs. It's very important to keep the bends in the wire to a minimum. Lots of pilots use them, but I don't like the flexible Nyrod-type systems. Any movement of flex here could allow surface flutter, and also cause a split-second delay crash. The plastic clevises and control horns supplied in many kits leave a lot to be desired. Get these items from Du-Bro or Hangar 9.

Dirt and grit will weaken the plastic clevis pin very quickly, and generally they are too soft and flexible. Consider using metal or the super strong carbon fiber clevises and control horns. Metal-to-metal contact is taboo, but most metal systems have an insulator to prevent any metal-to-metal contact. Always install a rubber or nylon safety "keeper" on this and on all your clevises.

Crashes are extremely frustrating and expensive. With a better understanding of what causes crashes, we can more easily prevent them.

Servo Damage Crashes: Servos can be unknowingly damaged by a hard landing or by bumping a control surface while loading the airplane into a car. What happens is the servo's gears get cracked but it continues to operate until subjected to flying loads, then the gears break. After a hard landing or a bump, and from time to time, check your servos by applying slight hand pressure to the control surfaces while operating the servo. If it takes hand pressure, it will usually stand up to flying loads.

Take-off Stalls: The airplane will very likely turn to the left during take-off. One method to prevent this type of crash is a high-speed takeoff run and a shallow climb after liftoff until maximum climbing speed is reached. Use rudder to maintain direction with very careful use of ailerons to stay level. If the engine quits on takeoff, don't try to turn back to the runway. Keep the airplane heading into the wind and make your landing.

Landing Turn Stalls: A very common pilot error occurs while setting up a landing approach and performing too steep a turn from downwind to final. Airplanes stall at a much higher speed in a bank, and a steep bank into the wind will quickly slow the airplane and cause it to stall. Keeping turns shallow on your approach will help prevent this type of stall, and using rudder to turn will also help keep the turns shallow and reduce the additional drag of the ailerons. This becomes especially critical if landing dead stick.

Routinely check and tighten motor and engine mounting screws. Carefully inspect and test all flying surfaces. Pull on them to make sure the hinges are secure. →

Seen at the Field



Silvio Sandvoss proudly displays his new Stuka. Its initial flight went off without a hitch.



Ray Gould gets ready the first flight of his new Magnum .46 powered BH Sprinter



Jon S retrieves his ultra-fast Ultra Sport.



Discussing the flight plan for the as-yet unflown A-26 Bomber. Powered by two Magnum .91 4-strokes, it is expected to be very fast.



The tour of Champions. . . Planes participating in the First Annual War Birds Over Menifee event stand at attention as the public passes by on their way to vote for People's Choice and Best of Show