



Crosswinds

March
2006



Newsletter for the Spring Area Radio Kontrol Society

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From the Cockpit by Duane Neeffe

Welcome to the March issue of the SPARKS newsletter-*Crosswinds*. Thanks to all of you who have contributed articles. Thanks to Diane Marson for publishing the newsletter.

Our next business meeting will be held March 1, 2006. At this meeting per the following SPARKS bylaws I will appoint a nominating committee. This is the beginning of the process to elect club officers for the next year beginning July 1st. Please review the following bylaws and plan to attend and participate in this important process.

SEC. 2 - ELECTION OF OFFICERS:

- (A) Officers of the club will be nominated and elected from the current open senior members.
- (B) The President will appoint a nominating committee at the March meeting.
- (C) The nominating committee shall make their recommendations at the May meeting for one or more nominee for each elected office. Additional nominations may also be made by any open member present at the May meeting. Nominations will be closed at the May meeting.
- (D) The names of nominees for each office will be listed in the June newsletter and mailed to the open members of the club.
- (E) Election of officers will be held at the June meeting.

SPARKS members should give careful thought to this nomination and election process. They may wish to nominate a person or be nominated for an officer's position. Open nominations may be made at the May meeting.

Please remember that Safety should be number one for all of us. We should always try to set a good example for others especially our new members and younger members. If you have any concerns regarding safety at our flying field please let Vice President and Safety Officer Jim Greer jgreer16@houston.rr.com or myself dneefe@aol.com know your concerns.

Remember set a good example fly safely!

February Model of the Month - Duane Neefe and Bridi Dirty-birdy 60

Bridi Dirty Birdy 60

By Bridi Aircraft Designs, Inc.

The Dirty Birdy 60 was one of the top pattern aircraft during the late 70's to early 80's. It was designed by Joe Bridi who also designed the Kaos line of airplanes along with many other models. The Dirty Birdy specifications are as follows:

Wing Span 64 ¼ Inches
Wing Area 688 square inches
Engine Size .61
Est. Weight 7.75 lbs.
Symmetrical Airfoil



I was searching on EBay one night and did a search for Bridi. I saw the Dirty Birdy for sale and joined the bidding process. The kit arrived in about a week and I started building it. The fuselage is built upside down on the board with a line drawn down the center to make sure the formers are correctly placed. The fuel tank was purchased and installed during the process and is a Hayes 16 oz. slim P/N 146/M.S.R.P.. Construction with triangle stock results in a nicely rounded fuselage.

The wing and stab are built-up using conventional rib and 3/32nd sheeting. The ribs are held in place with main spars and steel rods which are placed in slots at each end of the rib. I added balsa blocks to the building board next to each rib with a center line drawn on each rib. This allowed me to make sure each rib was exactly parallel with the building surface. Dubro pinned type hinges were used with slots cut using a Great Plains Slot machine. This was my first time using this machine and it does make this chore much easier.

The plans show both conventional and retract landing gear with main gear included but no nose gear. I purchased a Dubro steer able nose gear Cat. No. 153 and bent the 90 degree axle. I used Dubro Treaded Lightweight Wheels Cat. No. 275TL 2 ¾ inch for 12 inch prop clearance.

The Dirty Birdy is covered with Coverite 21st Century Fabric covering. This material is very heat sensitive and I would recommend the purchase of the Coverite thermometer which can be used to adjust the iron temperature. My wife Melodie helped with the trim design which consists of over 54 individual pieces of trim on the top of the airplane with rolling ribbons of different colors. The bottom is trimmed in darker colors to allow visibility during rolling maneuvers. The colors used are yellow, dark red, dark blue, and light blue. The canopy was clear before we dyed it using Rit black dye. The dye was heated to about 130 degrees and the canopy was immersed until the proper tint was obtained. There is a working Voltage watch device inside the canopy.

The engine is a Super Tigre SUPG0205 G75 Ring .75 engine. <http://www.supertigre.com/engines/supg0205.html>. This engine supplies 2.18 hp at 27.0 ounces of weight including muffler. This is .2 ounces heavier than the Super Tigre .61 ring engine which supplies 1.75 hp. I have used 11x8 and 12x7, 12x8 inch props. The engine was started on the first flip, adjusted for proper mixture, and flown on the first tank of fuel. The third tank of fuel the engine really started to perform and seemed to be completely broken in by the tenth tank. I have flown it over 18 minutes with significant fuel remaining.

Knife edge flight required very little mixing and the elevator and ailerons provide smooth flight control. The Dirty Birdy slows down for nose high landings on the main gear. Spins are straight down with no tendency to spiral. Two servos were installed on the ailerons to provide aileron differential. They can also be used to control flaps and air brakes using a Futaba 7CHP radio.

This was an original Bridi kit which is now produced by Bluejay airplane kits at <http://www.bridiairplanes.com/hangar/index.html>. Their price for the Dirty Birdy is \$110 and \$20 for shipping. They also make similar Bridi kits which were versions of the Dirty Birdy 60. I highly recommend this airplane to any one who wants a very stable aerobatic aircraft. It does not seem to exhibit any bad characteristics and the kit is easy to build.

Duane A. Neefe

In case you missed the February meeting, here are a couple of important items

Treasurer George Terry reviewed the income and expenses from last June until the current date. His very detailed report, of which he gave each member a copy, itemized all income and expenses. Upon review by the membership, it was suggested that we consider removing the trash cans (saving \$575.00) and having the field mowed only once a week during the peak season instead of the two times per week last summer. **Everyone should take their debris home.**

According to the SPARKS Bylaws, a majority of the Open Senior members present can elect to raise the dues and/or initiation fees at the February meeting. **In accordance with this Bylaw, a vote was taken to raise the annual dues to \$125.00 for senior members commencing with the new Club year in July. No other changes in the current dues or fees were made.**

In the interest of safety, it was noted to be extremely cautious in handling your transmitter when the **plane engine is running**. It was suggested that you place your finger over the throttle stick to prevent accidental acceleration. Care should be exercised if the transmitter is attached to a neck strap; you should not let it dangle. The transmitter can rotate on the strap, allowing the throttle stick to get caught on a clothing item.

Shots from the Field—before our windy, wet weekends set in.....sorry I haven't been out lately to report on more new craft....



Ron Hendrick's new Excelleron made its maiden flight on Jan. 29th. Power is supplied by an OS 120 four stroke motor.

Jim Sheffield has been doing some custom paint designing on his Pattern plane 'Bubbles', a.k.a. Genesis !



Unbelievable antics of Russian Jet
- Su-30MK
submitted by J. R. Carpenter



Check out the MAKS Air Show:

<http://www.aviapedia.com/category/exhibitions/maks/>

In particular, look at this video of the Sukhoi—Su-27 Flanker

Second video on main page [Su-30MK video](#)

Also take a ride** with the star Russian stunt pilot, Valery Sobolev

fourth video on main page [Valery Sobolev L-39 pilotage](#)

** P.S.—don't eat first

Mystery contribution??? Someone sent me this photo and I cannot determine the contributor??? I filed the photo but failed to note its sender. Please help me out

It's certainly a strange looking craft???



"Winter Puts a Crimp on Flying in Russia"

By Lee Dillenbeck

Once again, my good friend Dmitry Bernt has kept me up to date as to events in his life in Russia. For those of you who have not been keeping track of international news, much of Europe and Russia/Siberia in particular have suffered a particularly brutal winter this year.

Dmitry told me that with the approaching winter weather, he had to get his planes all hung up in "winter storage" out at their Summer house or Dacha before the real cold set in. The Dacha is located near Alabushevo, which is a short drive outside of Moscow.



Winter Hangar



As the snow fell and the temperature plunged in the area, Dmitry at least knew that his planes were safe in the house, though the building is NOT heated! Another interesting note is that Dmitry's Mom stores some of her pickled vegetables in jars under the floor of their Dacha, along with the bulbs of some of her more sensitive flowers she digs up each fall for safe-keeping.



Left - Last Fall

Right - Last week



Unfortunately, with local temperatures hitting -35° F this winter, Dmitry said that on a recent trip to check on the Dacha and planes, he discovered that the pickled cucumbers were frozen solid in the storage area under the house with his Mom's flower bulbs. He said that was a sure sign that her Dahlia bulbs were killed by the deep freeze. Some of you may remember some of the pictures I took of her Dahlia's when I last visited them last fall. At least his uncle said that he should be able to locate her some new Dahlia bulbs for spring planting!



Photos from last fall



Just for Comparison purposes, Dmitry sent along several pictures both inside and outside their Dacha so that we can see the differences between Russia in winter, and the same location I photographed last September.

Given slightly warmer temperatures the last week or two, the Bernt family has even brought out their cross-country skis to tour the countryside and woods surrounding their Dacha.

The next time any of us are tempted to complain too long about our "winter" here in Houston, and occasionally missing a weekend of flying, I guess all we have to do is take a look at Dmitry's winter and count our lucky stars!!



Recent Photos

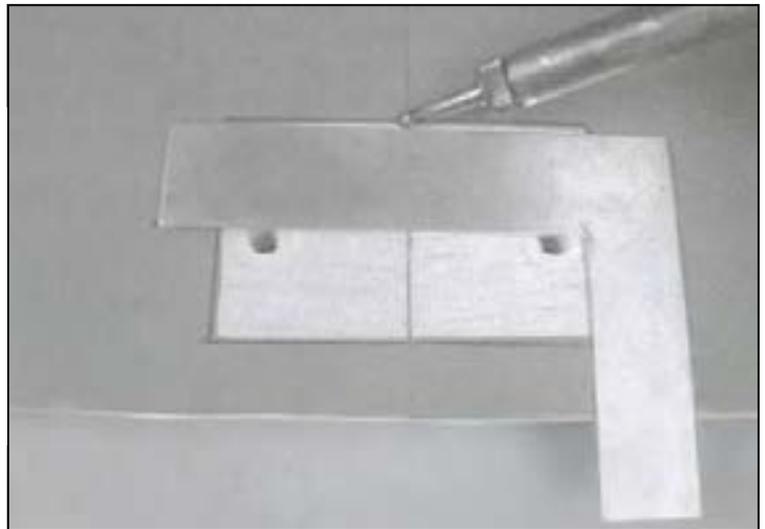
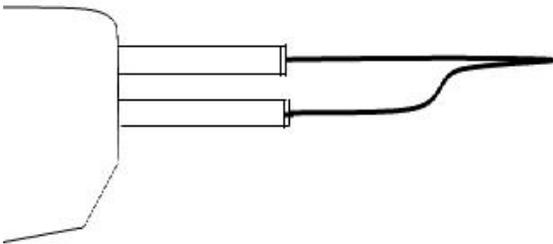


Building Tip from Mike Rose

How to cut heat shrink covering from Balsa.

When assembling ARFs, many times the covering is required to be removed from balsa sheeting or slabs. This can be a frustrating job (trying to keep from cutting into the balsa).

Use a soldering iron to cut the covering from the area needed to be exposed. The tip of the soldering iron doesn't have to be sharp, but a fine tip does work best. I shaped a piece of clothes hanger wire and crimped the end as shown below. Then the tip was slightly filed for a fine tip.



Allow the iron to heat fully. Use a straightedge to guide the soldering iron at a rate that will just melt the covering and not burn into the wood. The hotter the soldering iron, the faster it must travel to melt a fine cut.



SPARKS Spring 2006 Fun Fly

Mark your calendar for Saturday, March 18th for the Sparks Spring Fun Fly, with a rain out date of March 25th.

As always, there will be fun, fellowship and a chance to fly in the competition.

Rod Kuntz has generously volunteered to be our Contest Director, so please contact him if you can volunteer with the event.

His email is rakuntz@flash.net

More details will be announced at the
March Meeting

LIKES ULTRA STICKS by Homer Davis

Readers of the SPARKS Newsletter know that I recently had a mid-air with my 1.20 size Hangar 9 Ultra Stick Lite that pretty well destroyed it. I immediately purchased another one at Larry's, which turned out to be Ultra Stick Lite No. 4, and, as of this writing, has 10 flights on it. Looking back over my Ultra Stick records I found some things that may (or may not) be of interest to readers.



Above -Homer Davis with Ultra Stick Lite No. 1

I purchased my original Ultra Stick in January of 2000, way before the Ultra Stick Lite was introduced, and, with a few gaps, have had one in more or less flying condition ever since.

Original Ultra Stick

Period from purchase to completion: 1/24/00 to 3/31/00 - 66 days

Elevator & rudder servos location: Normal position in fuselage with wooden pushrods.

Adjustment for CG: Original battery position in fuselage would not allow spins. Moved battery to tail which moved the CG from the recommended 4-7/8" behind the wings leading edge to 5-1/4". This allowed fairly decent flat spins.

Engine: Moki 1.35 No. 1 with APC 16x8 prop

Fuel: Power Master 5%

Total dry weight: 12.0 pounds

Service dates: 4/11/00 to 6/28/03

Number of flights: 465 (The Ultra Coat was getting in bad shape and a recover job wasn't far off.)

Cause of crash: Flew out of range; may have forgotten to extend Tx antenna

Damage: Plane destroyed. Engine and most of other equipment OK.

General Comments:

The original Ultra Stick made no attempt at lightness. Nearly everything, including the control surfaces, were solid, slab balsa.

As a result of the very heavy control surfaces, they were prone to flutter. Nearly everyone with an Ultra Stick experienced aileron flutter sooner or later. Mine fluttered after 127 successful flights and tore off both ailerons despite having a Futaba S9202 coreless servo on each. Through blind luck, I was able to land it without further damage at the old field. With the 12.0 pound weight, the Moki 1.35 had fair vertical but on most days it was not unlimited.

Ultra Stick Lite No. 1

Period from purchase to completion: 12/9/03 to 2/22/04 - 75 days (Holidays slowed me down.)

The US Lite was not available when I crashed my original US. This accounts for the 5-month gap from crash to purchase. I wasn't too crazy about having another plain Ultra Stick.

Elevator & rudder servos location: Normal position in fuselage with wire-in-plastic-tube pushrods.

Adjustment for CG: Moved battery to tail and added 1-1/2 oz. of weight, which allowed flat spins.

Engine: Moki 1.35 No. 1 with APC 16x8 prop

Fuel: PowerMaster 5%

Total dry weight: 10.0 pounds

Service dates: 2/28/04 to 3/8/05

Number of flights: 94

Cause of crash: Believe battery in tail came unplugged due to fiberglass tape drying out.

Started using heat-shrink tubing over connections, where possible.

Damage: Fuselage destroyed, wing reusable. Minor equipment damage.

Ultra Stick Lite No. 2

Period from purchase to completion: 3/9/05 to 4/6/05 - 28 days

Elevator & rudder servos location: Normal position in fuselage with wire-in-plastic-tube pushrods.

Adjustment for CG: Moved battery to tail and added 1-1/2 oz. of weight, which allowed flat spins.

Engine: Moki 1.35 No. 1 with APC 16x8 prop

At the time of this crash this engine had 630 flights, which is equivalent to 105 hours, and it was still performing flawlessly without any repair work. When the head was removed for use on the next engine, it had almost no carbon deposits.

Fuel: Power Master 5%

Total dry weight: 10.0 pounds

Service dates: 4/8/05 to 10/22/05

Number of flights: 71

Cause of crash: Believe clevis broke on elevator while practicing loops for the pattern contest.

Damage: Plane, engine, muffler, fuel tank, Rx, Rx battery and one servo destroyed. This was the most costly crash I have ever had.

Ultra Stick Lite No. 3

Period from purchase to completion: 10/25/05 to 11/18/05 - 20 days

Elevator & rudder servos location: Moved to tail. Eliminated long wire pushrods.

Adjustment for CG: With battery in normal fuselage position and servos in the tail no additional weight was needed for desired CG.

Engine: Moki 1.35 No. 2 with APC 16x8 prop

The head on the new No. 2 Moki was found to have stripped glow-plug threads and the head from the No. 1 Moki was used to replace it.

Fuel: Power Master 5%

Total dry weight: 9.9 pounds

Service dates: 11/29/05 to 1/14/06

Number of flights: 19

Cause of crash: Mid-air. Had enough time to go to low throttle but not sure the engine was able to respond.

Damage: Plane destroyed but all equipment reusable, except one servo.

Ultra Stick Lite No. 4

Period from purchase to completion: 1/15/06 to 1/29/06 – 13 days

Elevator & rudder servos location: Moved to tail.

Adjustment for CG: With battery in normal fuselage position and servos in the tail no additional weight was needed for desired CG.

Engine: Moki 1.35 No. 2 with APC 16x8 prop

Fuel: Power Master 5%

Total dry weight: 9.6 pounds. (Didn't do anything special for the 0.3 pound reduction, it just came out this way or else my fish scale is wrong.)

Service dates: 2/3/06 to present

Number of flights: 10

Comments:

With the lighter weight, the Moki 1.35 No. 2 has pretty much unlimited vertical despite having only 19 flights on it. It is still breaking in and will continue to do so for a considerable time.

One thing I found odd on the No. 4 US was that the wing aileron and flap servo holes were moved back and I had to make new carbon fiber control rods to fit.

Conclusions

The Ultra Stick Lite is a blast to fly and is capable of doing a lot more than my meager flying abilities permit. The large flaps allow landing at a walk.

I am getting faster at putting them together and if my back permitted me to work longer than 3-4 hours at a time, I could do it even faster.

I am experiencing a steadily decreasing number of flights per plane. (465, 94, 71, 19, ?)
Based on this trend, my current plane doesn't have many flights left. (I'M KIDDING, I HOPE!)
By moving servos to the tail sometimes the desired CG can be achieved without adding a lot of extra weight.

I am a fan of Moki engines despite the 2nd NIB one having a stripped head. Both have performed flawlessly despite many warnings from other owners of their poor experience with the 1.20 size. I was told I would have to use a special glow-plug, use a fuel regulator, etc. I decided to just follow the Moki instructions, including a thorough break-in, and see what happened. I have been rewarded with excellent performance and can't remember more than 1 or 2 dead sticks due to other than running out of fuel. (I have forgotten to refuel on more than one occasion.).

If I had a complaint it would be that it is sometimes hard to start in cold weather, but I attribute that more to the low recommended 5 % nitro content of the fuel rather than a fault of the engine. I have numerous left over parts for the 1.20 size Ultra Stick Lite, including a compete wing.

Contact me if you have a need for parts and I will see if I have it.

Many Thanks to the contributors for this month's issue of our *Crosswinds* newsletter.

J. R. Carpenter Homer Davis Lee Dillenbeck
Ron Hendrick and Mike Rose

Please send your building tips, websites, articles, photos etc. to me...With the dreadful weekend weather lately, I have not been to the field to gather info, or new plane photos...Your contributions are very appreciated. Thanks, Diane Marson

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