THE ANTENNA

The Official Publication of The Pennsylvania Avenue Radio Control Society Of Brooklyn, New York.

Volume 38, Issue 7 **July, 2006**

IMPORTANT DATES

7/11	General Meeting
7/14-16	SRW 2nd Annual Fun Fly
8/8	General Meeting
8/12-13	IMAC Contest
8/26	Annual Warbird Event

PARCS 2006 Dues

Renewing Members $ 72.00/ Seniors $62.00

New Members $ 125.00/ Renewing under 18 $ 35.00

New member under 18 $ 65.00

Dues can be sent to;

Luther Farmer, Treasurer

145-48 182nd Street

Springfield Gardens, NY 11413

(718) 712-4276

Please come to the July general meeting. There will be a motion introduced pertaining to this year's holiday party.

Field Rules Reminders:

1) Smoke has been allowed for use at the flying field.
2) There is still a 400' ceiling in effect where full scale aircraft are in the immediate vicinity.
3) When full scale aircraft are in the air, or if you fly over 400', all pilots must fly with a spotter. (this is an AMA rule.)
4) All giant scale pilots must have someone to hold their aircraft while starting.
5)

Please be aware of your surroundings. Help us to have a safe and enjoyable flying season.

3D flight is one of the fastest growing areas of our hobby. As these 3D airplanes like the Seagull Harrier and Hangar 9 Funtana become more and more popular, the ideas and concepts of a good mechanical setup become ever increasingly important. A good mechanical setup not only makes the 3D flight easier, but also decreases the chances of flutter.

A good setup starts when we're building the airplane. The following things apply to the new breed of ARFs as well so don't overlook them.

Hinges: Hinge lines should be straight and centered on the surface.

Pivot Point of Control Horns: Control horns should be installed such that the pivot point of the horn is exactly on the hinge line to avoid building in a differential.

Servo Arms: The arm on the servo should be exactly parallel to the hinge line. Servo arms should be switched around until you get the spline alignment correct. Always try to avoid using the radio to center the servos whenever possible.

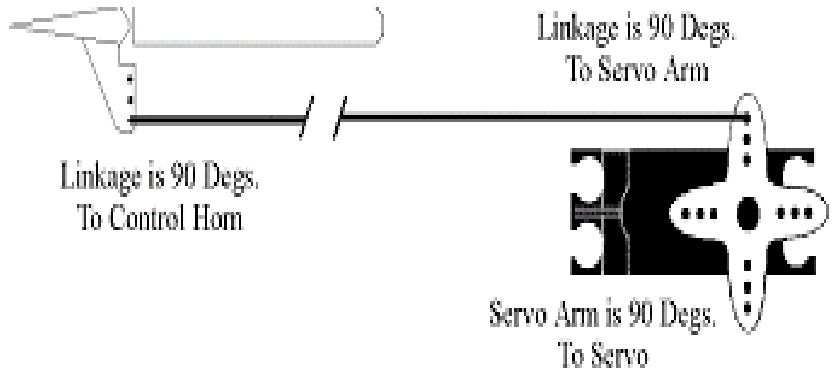
Seal Hinge Lines: Hinge lines should be sealed so no air can pass through.
It doesn't matter how tight you think it is, seal it on the bottom with some covering.

Last but certainly not least is mechanical advantage. You might have heard this term before, but what does it mean? Put simply, mechanical advantage means giving your servos the leverage necessary to move these huge control surfaces in flight. Even the strongest servos can be rendered useless by a poor mechanical setup.

Let's start with the radio. Select the ATV feature and set all used channels up to 140% in both directions. Don't forget the flap and aux channels if your using multiple aileron or elevator servo setups.

This step allows for the maximum travel out of your servos and therefore maximum servo resolution. Most modern computer radios are 1024 radios, meaning there are 1024 steps of servo resolution for it's full range of travel. By running your ATV up to maximum, you utilize all 1024 steps to command the servos.

Now that we have the radio set up, we need to connect the pushrods. At neutral stick, you should always have your pushrod 90 degrees to the servo arm. Ideally, your pushrod geometry should look like the diagram below:



PARCS 2006 Executive Board

President:	Scott Schultz	Field Safety Officer:	Carmen Ciccone
Vice-President:	Susan Salomon	Asst. Field Safety Officer:	Ray Alberghini
Sergeant at Arms:	Ray Sarquiz		Mike Casey
	Vinnie Carotozzolo	Recording Secretary:	Jon Gerber
Treasurer:	Luther Farmer	Corresponding Secretary:	Dr. Sam Masyr
Webmaster:	Walter Bellini	Field Maintenance Officer:	Howie Jackson
Newsletter Editor:	Scott Schultz		

www.flyparcs.com

Field Phone (718) 951-8327

Futaba 12Z - New 12 Channel Radio

More 12Z Features:

- 2048 G3 PCM resolution — twice that of 1024PCM high-end radio systems.
- "Backwards compatible" with FM/PPM, and 1024 PCM.
- Combines airplane and glider functions conveniently into one program.
- Supports 13 different wing types, 3 tail types, 3 motor types and 7 heli swash types.
- Offers 8 total flight conditions (7 plus the default).
- Allows a modeler to program a model with 2, 3, or 4 engines and set all the linkage throws to work at one time or together.
- Features digital trims, which offers precise tuning, on all 4 main channels.
- Virtually the whole system can be fine tuned in almost every level.
- Six factory-set Variable Dual Rate (VDR) curves can be assigned to any function in any flight condition configuration.
- Variable Dual Rates (VDR) and Expo can be combined so they are automatically activated when a function is activated — no program mixing required.
- Multiple servos controlling a single function can be conveniently grouped onto the transmitter operation.
- Servos can be plugged into different receiver channels, even non-consecutively.
- Each servo's EPA (End Points Adjustment) can be adjusted individually from the transmitter so that no separate servo synchronizer is needed for mixing.
- 10 programmable mixes can be freely customized for each condition.

Newsletter Editor
47-19 170th Street
Flushing, NY 11358