SMOKE SIGNALS

NEWSLETTER

Photos of Ed Wiemann & Mike Canale installing the new wheels on the safety benches.
A WELL DONE JOB BY 2 OF OUR MEROKE MEMBERS.

2015

September 3
Club Meeting
Show & Tell

September 13
Meroke Club Picnic

September 17
Club Meeting
Battery Charging
Nelson Ramos

September 19
PAINTBALL SHOOTOUT

October 1
Club Meeting
Show & Tell

October 15
Club Meeting
Control Throws & Connections

October 17,24 & 31
Builders Club
Saturdays 9a-12n
Wantagh Memorial Congregational Church
Wantagh, NY

September 2	Sal Spallino
September 8	Al Weiner
September 26	Mike Hagens
October 13	Michael Cheung
October 23	Allen Berg
October 27	Russell Rhine

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Thanks to Richard Green for his e-mail "70 CEMENT ARROWS" leading me to web site MESSYNESSYCHIC where I found this article.

The Forgotten Giant Arrows that Guide you Across America

All over the country, 70-foot concrete arrows can be found in remote locations. Follow them, and they'll point you out of the desert.

They come courtesy of the US Postal Service's Air Force and will point you all the way across the continental United States.

They were constructed in 1924 to guide postal planes in the right direction as they carried mail from coast to coast.

These old planes couldn't rely on radio as much at the time, so they used these arrows, along with beacon towers, to navigate.

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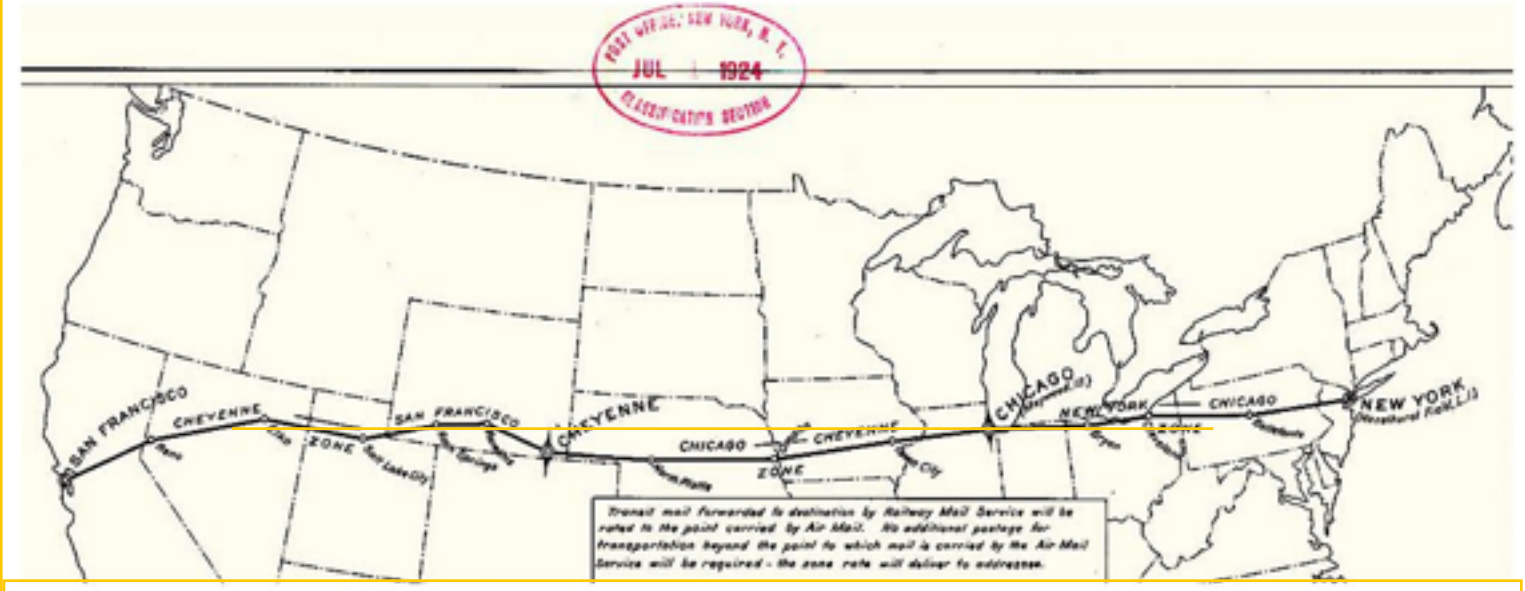
The arrows and beacons were spaced ten miles apart bisecting the United States. Reportedly 700 of these stations stretched from from San Francisco to New York City cutting mail delivery from weeks to about 30 hours.



The towers were 50 feet tall and fixed with rotating gas lights that could be seen from 10 miles away, in order to help lost pilots find their way.

The 70 foot concrete arrows were painted bright yellow.

This is a model of the arrows and towers in their heyday.

World War II brought new advances in radio technology that effectively made the towers and arrows system obsolete.

The towers were mostly dismantled.

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There has been an effort to restore and preserve some of them.

Like this one in New Mexico complete with its generator shack.

This is a pretty cool piece of history, even if it was short lived.

To think of those early postal pilots navigating like this from coast to coast is mind blowing.

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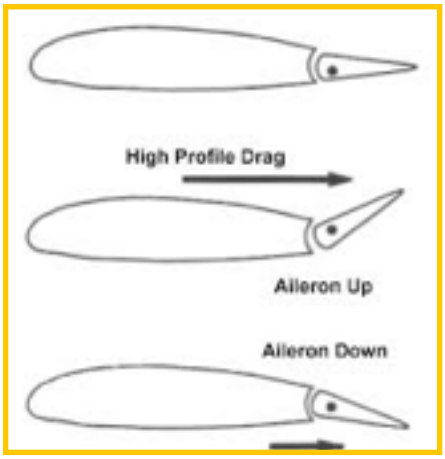
Thanks to Phil Friedensohn for sending this latest article for me to share with you.

MODEL Airplane NEWS electric flight

Aileron Differential: Why it's so important and how to set it up



For years, depending on the model setup, modelers often used offset servo output arms and bellcranks to achieve differential aileron movement. Today, however, using separate aileron servos and the aileron differential program menu in your computer radio has greatly simplified the task. But before we take a closer look, let's first check out the mechanics of our model during a turn or a roll to understand why aileron differential is so important.

AERODYNAMICS

Typically, most models are set up with equal amounts of elevator (pitch up and down) and rudder (yaw left and right) control surface movements. But when it comes to ailerons, equal amounts of up and down (roll left and right movement), can cause the model to yaw in the wrong direction. Here's why: When the ailerons are at their neutral positions, the lift and drag produced by each wing panel is equal and the model tracks straight ahead. But when a model has ailerons that move in equal amounts both up and down, the amount of drag (and lift) created by the wing panel with the down aileron becomes greater than the one with the up aileron. The panel with the aileron pointing downward moves up because it creates more lift. The opposite panel goes down (less lift) and causes the model to back toward the up aileron. But here's the rub! Because of the increased drag caused by the upward motion, that down aileron wing panel also slows down; this causes the model's nose to yaw in the opposite direction of the roll. The model yaws nose right in a left-hand bank/turn. This condition is known as adverse yaw. Without aileron differential, most airplanes require a certain amount of coordinated rudder to prevent, or at least minimize, adverse yaw while the model is banking through a turn. For sport and scale planes, this can be done manually or with a program mix-however, it won't work in all types of flight conditions.

HIGH-PERFORMANCE PLANES

This adverse yaw thing is also an important consideration while flying aerobatic planes. Aerobatic pilots need to set up their models to react in pure yaw, roll and pitch motions. During a roll (whether it's executed on a horizontal or vertical line), the model must roll axially without its nose yawing or wandering off the straight line of flight. Aileron differential helps keep the model's tracking straight.

YOUR MODEL IS EXPERIENCING ADVERSE YAW IF:

The model skids through turns.

The tail drops during a turn.

The nose swings out of the turn.

It's very difficult to roll your model in a straight line.

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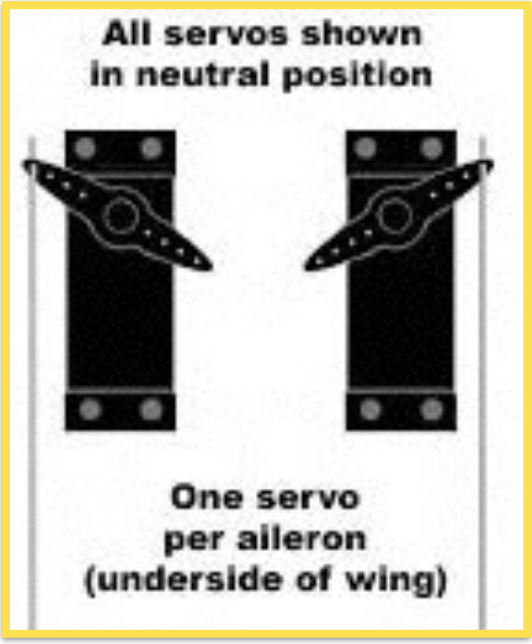
MODEL Airplane NEWS electric flight

Aileron Differential: Why it's so important and how to set it up

Even with high-speed jets and race planes, correcting adverse yaw with aileron differential is much better than relying only on coordinated rudder mixing. If speed is the ultimate goal, then minimizing drag is key. Less rudder deflection equals less drag. Fine-tuning your model for maximum performance is easier if you know what to look for and how to correct it. If you can't use coordinated rudder to correct adverse yaw, then aileron differential is the way to go. Using your radio's programming is the easiest way to get the job done.



HOW TO USE A PROGRAM MENU

> Install dual aileron servos. One connected to the aileron receiver port and the other in the Aux.1 port. Make sure the aileron servo moves in the proper direction.

> Activate the flaperon wing type or, depending on your radio system, the dual aileron function. Install and connect the ailerons and control linkages.

> Start with 30% to 40% differential (down aileron 30 or 40% less than up).

> If differential mix is backwards (more down than up), reverse the servo connections by switching the aileron and Aux. 1 servo leads.

>Adjust the differential percentage after flying the model. Land the model before making adjustments and test fly again.

PAINTBALL SHOOT OUT

SATURDAY SEPTEMBER 19, 2015

11:00 AM - 4:00 PM

Rain Date SEPTEMBER 20, 2015

LUFBERY AERODROME

CEDAR CREEK PARK, SEAFORD, NY

FUN FOR ALL AGES

SHOOT THAT PLANE OUT OF THE SKY

Children under the age of 12 require adult supervision

FOR MORE INFORMATION, PLEASE VISIT OUR WEB SITE AT www.meroke.com