







Tossing a few wild thoughts around:

Could these hinges be hinged close to the top surface of the wing? In that case, you could do most of the hinging via iron-on covering, maybe supported by a few CA-hinges? Then it would be easiest to use the rear spar itself as hinging support, with shear webbing connecting the two rear spars with each other. There would even be enough space for internal (RDS) servo linkage.

Having just read a few of the (german) flying wing books by Robert Schweissgut - and maybe others can chip in on this: what about splitting elevator and aileron functions - e.g. using a bit of the current trailing edge close to the "fuselage", for elevator function, while aileron function is from the current elevons? I know the built has already proceeded, so maybe this is better be taken as "food for thought" only. Bottom line in his book is that Schweissgut found a substantial increase in flight performance when splitting these functions.

Good thinking KNS,

I don't like personally the iron on hinging method, as it creates (requires) a gap under the elevons to enable downwards movements. It may also be not so reliable when the time goes by, as the covering may become bad. I also have not decided yet which covering to use, maybe just tissue or silk, I don't like that glossy covering, so then I really need hinges. But nevertheless, the spruce spars are strong enough to hold hinges on the top side of the wing though.

I also have been thinking of splitting the two control functions, as mixing the elevator and ailerons functions on the transmitter just gives half effect of the two. Do you mean to put the elevator control function in the main wing structure close to the wing tip and keep the current elevons for ailerons only. I still may be able to do that change. I have seen/read somewhere that the horten iV even had 3 flaps on each wing to control the plane.

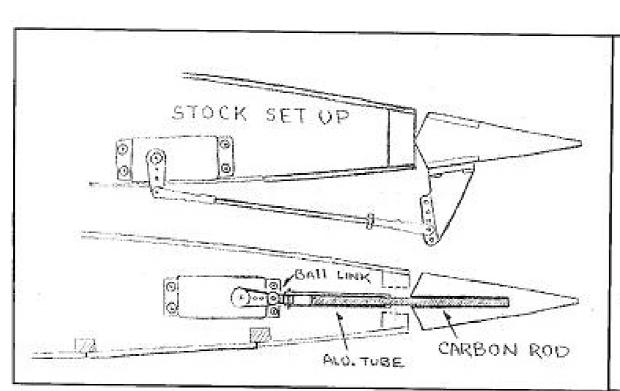
I even can put rudders on the 2 fins, but I also don't know about their effectiveness either.

RDS servo's are new to me, but I just checked the internet for it and I think, this is a very interesting option.

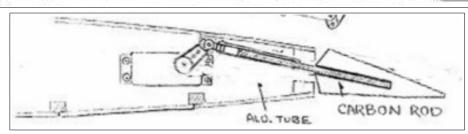
Thanks for your input,

Michael

I have been searching on the internet for hidden linkage constructions for ailerons, and I have found an alternative for the RDS linkage system from one of my fellow Dutchman.



The sketch above depicts the stock aileron linkage and the "hidden" drive system we used. A carbon fiber rod is embedded in the aileron. The rod projects forward through the trailing edge at the hinge line. It stips into an aluminum tube that is fitted with a baillink attached to the servo arm. As the arm moves through its arc, the telescoping action of the aluminum tube and carbon rod allow for the length change required to move the aileron.



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