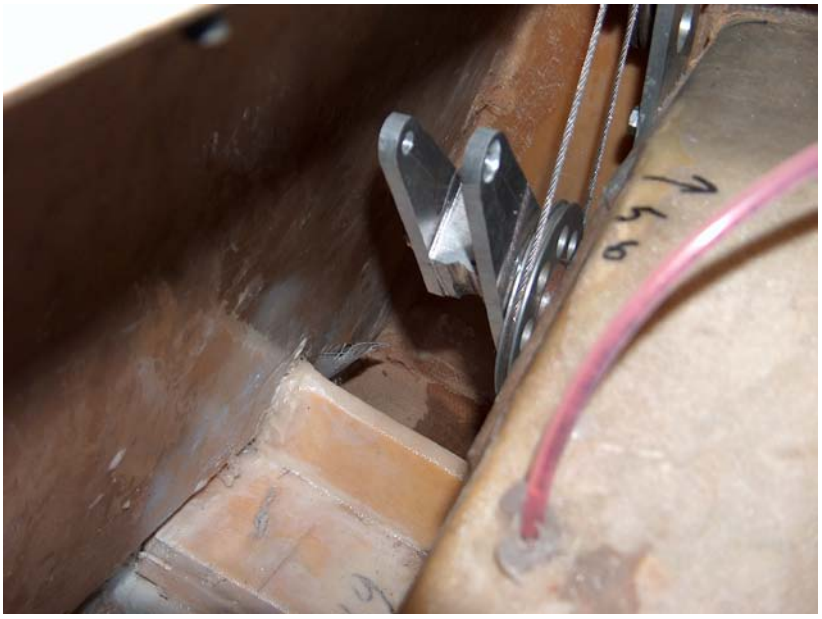
The changeover from cable operated to electrically operated Aerocet 1100 amphibs was my own experiment. The following illustrates my own experience and is not a construction guide.
All of the materials used, except the actuators, came from my stash of scrap metals and spare parts and therefore are probably heavier and stronger than required. Still I saved cose to 2 lbs over the cable operated mechanism.
All of the cables were removed from the floats. I never had installed the Johnson bar. The large control pulley was replaced by a lever 4 5/8” in length centre to centre. The small control pulley with the rest of the nosegear mechanism stayed in place.
The actuator I used is a Firgelli 8” throw, obtained on line, but there are other brands suitable. I made the mistake of buying an actuator with a built-in potentiometer, thinking I could mount a gauge on the panel indicating the position of the wheel. I discarded the idea when it came to me that if the linkage breaks the reading would show the actuator position but not the wheel position.



I built an adjustable bracket – the adjustment part turned out to be not necessary.

The bulkhead where formerly the cables were anchored was re-enforced with fiberglass and sheet aluminum, then notched at the top for the actuator to pass through and then the assembly was bolted on.

Above: Wheel up position.

The above picture shows test installation. I covered the actuators with appropriate rubber boots to protect against moisture.

The electrical cables are long enough to reach just inside the fuselage where I used automotive receptacles to connect them with cables to the two way switch on the panel. This helps in quick removal of the floats for changeover to wheels.

To positively identify the up position of the wheels I installed a microswitch which is activated by a lever mounted to the idler pin (Part number 480-5042) of the main link (part number 480-6080-10) powering two LED lights on the panel. The microswitch in the picture will be replaced for the coming season by a waterproof switch since the one below shows some corrosion after only one season. The electrical cables are also equipped with receptacles for quick disconnect.

Finally I have installed a main retract system switch as well as the two way switch to avoid a problem if I accidentally retract or deploy the system on the ground. This would overstress and break the linkage.

By the way, Datum Air, a manufacturer of wheel penetrating skis and conversion kits for electrically operated Puddle Jumper floats, is seriously thinking of developing a conversion kit for Aerocet 1100 floats. You can visit them on line www.datumair.com