LOOP SPEED AND LOOP TURNOVER SPEED

Correction to consider :

The formulae I gave will work for the relationship betwen loop leg speed, but not for loop turnover rate.

V1: velocity of the fly leg

V2: velocity of the rod leg

VL: speed of loop turnover

Vav: speed of loop advance (in respect of the caster)

The formulae I've been using :

Vav = ½ (v1 + v2)

This works for shooting line or not because when not shooting,
V2 = 0.

HOWEVER, I'VE BEEN INFORMED THAT IT DOES NOT WORK WHEN LOOP TURNOVER RATE IS TO BE DETERMINED. BECAUSE OF THAT, A MORE ACCURATE FORMULA WHICH WORKS FOR BOTH SCENERIOS IS :

Vav = ½ (V1 – V2) = V2

When you do the math using actual figures, you will see that both come up with the same value for forward loop speed.

So : Vav is forward loop speed.

V1 is speed of the fly leg. Let's say, 80 m/sec.

V2 is s;eed of the rod leg. Let's say, 20 m/sec.

When shooting line :

Vav = 1/2 (V1-V2) + V2

Vav = 1/2 (60) + 20

Vav = 30 + 20

Vav = 50 m/sec.

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Now let's look at the formula I used :

Vav = 1/2 (V1 + V2)

Vav = 1/2 (80 + 20)

Vav = 1/2 (100)

Vav = 50 m/sec/ ! !

Problem is that my formula won't work for loop turnover speed. It has been pointed out that this turnover speed is very important to the propagation of the wave over the line while the loop is turning over. This is the wave and/or waves which represent our mends.

Therefore, the correct formula is :
Vav = ½ (V1 – V2) + V2

The correct set of formulae is summarized below

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Without shooting line:

VL = 1/2

V2=0

VL =**Vav**

Shooting line:

VL = 1/2 (V1-V2)

Vav= 1/2 (V1-V2)+V2

Triple haul:

V2= now has a negative value!

VL = 1/2 (V1+V2)

Vav= 1/2 (V1+V2)-V2

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