Ballasted Polar:

with the well known equation for lift:

$$mg = \tfrac{1}{2} \rho S V^2 C_a \quad (1)$$

and

$$o = m_b / m \quad (2)$$

o = ballast overload

m_b = ballasted mass

m = unballasted mass as from reference polar

we solve eq. (1) for V

$$V = \sqrt{\frac{m g}{\tfrac{1}{2} \rho S Ca}}$$

as we can consider everything except mass m as constant in the above expression we can conclude:

$$V_b / V = \sqrt{m_b / m} \quad (2)$$

or

$$V = V_b / \sqrt{o}\, V \quad (3)$$

with the second order approximation for sink:

$$Sink(V) = a0 + a1 V + a2 V^2 \quad (4)$$

and (3) in (4), we get for the ballasted sink:

$$Sink_b(V_b) = a0 + a1 \frac{1}{\sqrt{o}} V_b + a2 \left(\frac{1}{\sqrt{o}} V_b \right)^2$$

or simplified for direct coefficient modulation:

$$\mathbf{Sink_b(V_b) = a0 + \left(\frac{a1}{\sqrt{o}}\right) V_b + \frac{a2}{o} V_b^2}$$

A quick check of the new formula using polar of Nimbus 2 might explain my creepy suspicions flying bit too slow with my watered glider:

FB	S2F (old formula)	S2F (new formula)
30	125	125
35	133	135
40	140	144
45	147	153
50	153	162