\( b \) = clear width between trusses,
\( c \) = width of one truss,
\( d \) = depth of trusses,
\( W_1 \) = dead load per lineal foot for one truss,
and
\( W_2 \) = reduced dead load per lineal foot for the windward truss;

then the overturning moment of the wind per lineal foot is \( pA_1h \),
and it has the same effect as that of a couple of lever-arm \( b + c \),
and force,
\[ \frac{pA_1h}{b + c} \]

that is, the weight per foot on the leeward truss is increased,
and that on the windward truss is decreased, by this amount,
which gives the equation,
\[ W_2 = W_1 - \frac{pA_1h}{b + c} \]

Let
\( n \) = number of panels in the bridge,
and
\( n_1 \) = number of any panel, counting from the nearest end of the span;

then
\( W_7 \) = panel wind load,
and
\( W_2l \) = reduced panel dead load.

The compression on the windward bottom chord of the \( n_2^{th} \) panel will be
\[ \frac{n_1}{2} (n - n_1) \frac{W_7}{b} \frac{r_a}{d} \]

if we consider that the inclination of a lateral rod to a line perpendicular to the planes of the trusses is \( \tan^{-1} \frac{l}{b} \). The tension in the same panel, due to the reduced dead load alone, is
\[ (n_1 - 1) \left( \frac{n - n_1 + 1}{2} \right) W_2 \frac{r_a}{d} \]

except in the case of the first panel, to find the stress for which \( n_1 \) must be made equal to two.