



Alex Fraser Bridge

Delta, British Columbia, Canada

A balanced approach to bridge erection engineering

owner.... *BC Ministry of
... Transportation*
client.... *PCL-Paschen-Pike VJ*

When built in 1986, the 1,525 ft long Alex Fraser Bridge was the longest cable-stayed bridge in the world. SOMERSET produced and supervised the erection scheme using a 'balanced cantilever method' requiring precise sequencing of erection to ensure stability. The complete steel superstructure, including cables, was erected in ten and a half months of single shift work

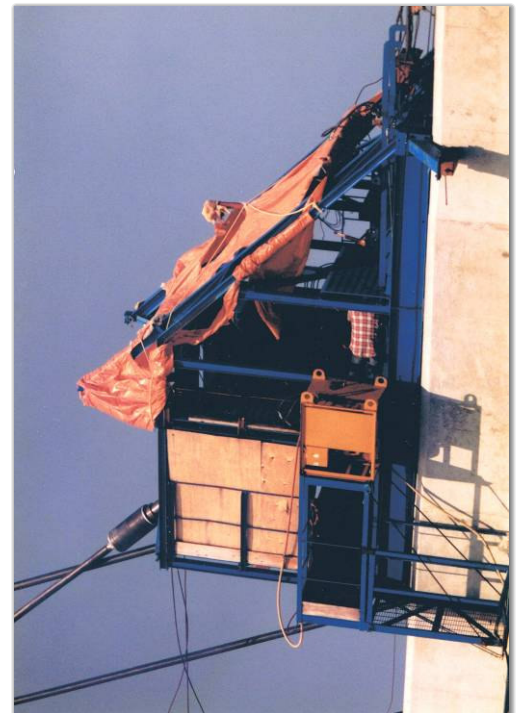
SOMERSET also designed all purpose built erection equipment such as innovative self-jumping access platforms and cable-stay deflecting mechanisms to handle the 25 ton prefabricated stays. The steelwork and precast decks were erected by four stiffleg derricks supported by specially built tie-down frames which could be rolled ahead sequentially



Balanced cantilever deck and stay cable erection at the North pier



Stiff-leg derricks on travelling tie-down frames



Self-jumping access platforms for stay cable installation