Never-Stop

Reflections on the Life-Cycle of an Idea

Approach

Introduce the Never-Stop Railway and key personalities

Identify turning points in the life-cycle of the idea

Reflect on the story
William Yorath Lewis 1874-1961

Life cycles in parallel

• ‘Never-Stop’ – kept alive for sixty years
• Champion and driving force:
  – William Yorath Lewis 1874 – 1961
• Lead Designer:
  – Benjamin Radcliffe Adkins 1872 - 1957
• Both worked on major projects, including:
  • Great Northern and City Railway [opened 1904]
  • New York East River tunnels [opened 1908]
• Both had careers in industry:
  – Lewis – boiler manufacture and design
  – Adkins – mechanical and petrochemical design
• Never-Stop became a significant ‘hobby’ for both men – supported by their families – for the rest of their lives.
Paris Exposition 1900

Emergence of the idea

• Began in early 1900s:
  – Lewis: work experience at Paris Exposition
  – Adkins: design talent and experience in industry
  – Mutual enthusiasm and appetite for a challenge
  – Meeting a need, or finding a use for a solution?

• First patent application 1902
  – Key enduring feature is the lead-screw with pitch to suit local speed and separation
Growth – seeking a purpose

• Further patents
• 1909 – escalator-like variant
• 1911 – foundation of Never-Stop features
• 1912 – aeroplane launcher
• Campaigning and Placement
  – ‘The London Traffic Problem’
  – ‘Intermittent’ versus ‘Continuous’ transportation
    • Papers, talks, letter-writing and meetings
  – Seeking to influence

Typical Urban journey time breakdown. Figure from paper to RSA in 1911: “Continuous Service Passenger Transportation in Relation to the London Traffic Problem”.
Never-Stop in practice

• Experiment in 1910
  – Ransomes & Rapier works, Ipswich

• Small-scale [300 yards] circuit in 1923
  – Kursaal Amusement Park, Southend
  – Used to demonstrate capability for Wembley

• British Empire exhibition, Wembley 1924-1925
  – 1.5 route miles, 85-87 vehicles in service
  – Three intermediate board/alight points
  – 1.5 mph to 12 mph speed range
The Empire Exhibition 1924-1925

- Actual Wembley route
- Preferred by Exhibition planners
- Sub-optimal gradients, sharp curves, unsuited to Never-Stop, poor traffic potential

Wembley operation

- 2,000,000 passengers
- 1,000,000 car miles
- Over 700,000 round trips
- ‘...without failure...’
- ‘...without any sign of distress in working parts...’
Separate ways

- Wembley installation is wound up
- Staff and expertise dispersed
- Lewis and Adkins pursue their own careers
- No further orders, little interest
- Patents kept alive
  - Seven further patents had been granted in 1920s for specific design features

1950s activity

- Lewis working with Adkins again from 1951
  - Further development of designs
- Emerging transport needs
  - City short-distance links, notably New York
  - UK – Heathrow, Victoria Line, Bank Travolator
- Networking and lobbying
  - American contacts from past work
  - UK Government ministers, public figures
  - Industry, trade associations and publications
  - Patents maintained
Decline

• Despite many attempts to be ‘noticed’, none resulted in adoption of Never-Stop
  – BBC interviewed Lewis
    • “Tonight” 30 September, 1957
  – Adkins continued to produce drawings until late 1957
  – Transport Ministry rejection of Lewis case
• Patents relinquished in 1960
  – Acceptance of the end for Never-Stop
16 April, 2001 – demolition of the last concrete track section and A-frame supports, North End Road, near Wembley Park Underground station

“...But only a practical trial in public service ... can determine whether or not the scheme is feasible.

I shall not rest until that is accomplished ...”

WYL draft reply to Frank Pick, December 1920.
Principal sources

• Science Museum/NRM York
  – Yorath Lewis Archive WYL 1961-257

• ‘Passenger Conveyors’