#### The Standards Hiatus by Lawrie Schonfelder & Miles Ellis

Why wasn't the standard sequence F66, F77, F88 What caused the the extra 3 years?

#### Where we came in

- LS involved from late 70s, joined WG5 1980, X3J3 1982
  - Modules
  - Precision/kind selection
  - Pointers
  - Generic overloading, inc. operators
  - Wrote Varying Length String standard & module
- ME joined both WG5 and X3J3 in 1986
  - Internationalisation features
  - Character kinds
  - General procedure issues

## Committees - early 80s

- US committee, X3J3
  - Designing language, writing US standard
  - Liasing with ISO committee (WG5)
  - ISO expected to adopt US standard as international standard
  - ~50 members
    - ~20 vendors
    - ~10 apps developers
    - ~10 big labs
    - ~10 general users

## Committees - early 80s

- ISO committee WG5
  - Members represent national standards bodies
    - 8-10 countries, 40+ attendees (Liverpool '87 had 54)
    - Majority of users over vendors
    - Heavy overlap with X3J3 members
  - Role, comment on X3J3 work & recommend direction

## X3J3 processes

- Very political as well as technical (but fun!)
  - Multiple shifting alliances and agenda
  - Small majority intent on major modernisation
  - Large, mainly vendor, minority
    - "standardise existing practice"
      - + "my one small pet functionality"
- Working dynamic
  - 10-15, active constructive developers
  - 5-6, positively destructive
  - Rest, various levels of passive participation
- Slow but positive progress until 1986

# WG5 processes

- Much larger moderniser majority
  - favours more advanced features
    - Several pet features never make it through X3J3, (Event handling, BITS)
    - In early '80s a number of WG5 members join X3J3
- Not overly unhappy through to 1985
- Wheels come off in '86/'87

#### The Grand Compromise

- First candidate document formal vote 1986
  - Resounding NO vote (document just not ready)
  - X3J3 officers panic, propose "grand compromise"
    - Very restricted subset
    - Internally inconsistent (voted piecemeal)
- Half X3J3 and most of WG5 appalled
  - Desperate work to correct damage
  - WG5/X3J3 meetings Liverpool '87
    - Detailed recommendations on content made by WG5
      - Put back most of functionality lost by "grand compromise", albeit some in much modified form

## X3J3 response

- The next three meetings worked on new & revised features
  - May '88 meeting voted on them all
    - Those receiving a two thirds majority were added to a list
    - The complete list was then voted on
      - It was resoundingly defeated!
    - The Chair panicked
      - Everyone was asked to bring their own proposals for the complete language to the next meeting!

### X3J3 and WG5 Meetings

- X3J3 meets four times a year in February, May, August and November
- WG5 usually meets once a year
  - In 1986 WG5 and X3J3 met back-to-back in Halifax, Nova Scotia
  - 1987 had back-to-back meetings in Liverpool
  - In 1988 France was hosting WG5 and would not consider meeting in August
  - So X3J3 met alone in August

#### Jackson Hole - August '88

- The meeting started with ca. 10 new proposals
  - Much horse-trading between votes reduced this to 3 by the middle of the week
    - ABMSW (similar to WG5)
    - Minimalist (existing practice + arrays)
    - Less minimalist (existing practice + arrays + VAX structures + MILSTD)
  - All attempts at further compromises failed

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• US members then voted to forbid the US delegation to WG5 from even presenting the ABMSW proposal!

## Paris September '88

- WG5 incensed!
  - ABMSW proposal placed on agenda by UK
  - Minimalist proposals voted down
  - Modified ABMSW adopted (+pointers + nondefault character + module for varying\_string)
- WG5 took control of content
  - Mandated a member to attend X3J3
  - Passed a resolution highly critical of the US

#### Boston November '88

- After every vote the WG5 rep. was asked if the result was OK
  - If it was not in accord with WG5's wishes it was taken again!
- The Chair had to report to X3 every day
- By the end of the week X3J3 had agreed a programme of work which more or less corresponded with what WG5 wanted

## Progress to F90 & beyond

- Several meetings to implement Paris '88 plan
- Formal voting & Public comment processing (18 months)
  - Vast number of comments
  - Organised disinformation campaign
- F90 finalised London March '91
- Standardisation process changed irrevocably
  - ISO the primary standard
  - WG5 controlling body, determines content
  - J3 development and editorial
- F95 and F03 both produced more or less on time

## Postscript

- In 1995 ME was appointed WG5 Convenor
- At his first meeting in this role a new method of using Type 2 TRs to 'beta test' features was proposed and approved
  - The US was not happy with this
    - X3J3 requested its SC22 representatives to oppose it at the SC22 Plenary
    - After discussions between the US HoD and the WG5 Convenor, the US supported the WG5 proposal

• The Final Step in the power transfer was made