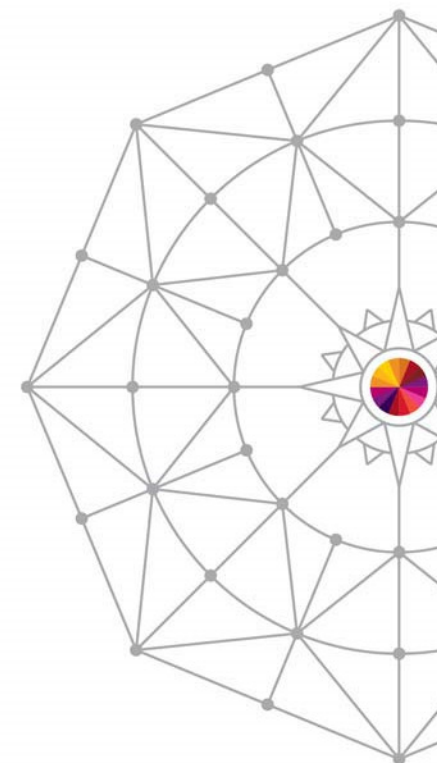


# The Rime of the Ancient Mainframer

*Session 16075*

*Bob Rogers*

*IBM Distinguished Engineer, Retired  
Trident Services, Inc.*



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Session  
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# Abstract

## The Rime of the Ancient Mainframer

Bob Rogers, who admits to witnessing only 45 of the 50 years of the mainframe, would like to unburden himself of some stories about what he has witnessed and heard from reliable sources over these many years. He started as an operator for IBM in 1969 where the core of OS/360 was developed. He had early experiences with CP67, the predecessor of zVM and witnessed the transition to virtual systems with SVS and MVS. He lead development teams of ever enlarging scope for the addressing architecture advances to XA, ESA and z/Architecture. z/OS is filled with thing that he helped to create - or was unsuccessful in preventing from being created. There probably won't be a script, but we doubt Bob will be lost for words.

# Guide to understanding the title and abstract

## The Rime of the Ancient Mariner

A Poem by Samuel Taylor Coleridge

### Short Synopsis

Three guys are on the way to a wedding celebration when an old sailor (the Mariner) stops one of them at the door (we'll call him the Wedding Guest). Using his hypnotic eyes to hold the attention of the Wedding Guest, he starts telling a story about a journey he took. The Wedding Guest *really* wants to go party, but he can't pry himself away from this grizzled old mariner.

After the journey, the Mariner is desperate to tell his story. He feels a terrible pain until the story had been told. The Mariner says that he still has the same painful need to tell his story, which is why he stopped the Wedding Guest on this occasion.

## The Early Day

- REPLY,'U'
- The 1403 printer and the coffee drinker
- Formatting the job queue: computer behavioristics
- The bell on the S/360 Model 67 and CP67
- Revving up the removable media disk drives
  - Popping the plug on 2314 drives
  - Head Crashes
- Bob's Ecology Program
- Editing a punch card
  - Zero with slash 0

## The Early Day

- Beauty of the S/360 model 70
- LCS “same day service”: HIAR(1)
- 7-track tape: 200 BPI
  - 3600’ at 6250 BPI = 180MB
- Branching around to add 0
- Unaligned operands on the model 168
- Model 65 upgraded to 1MB (and 3 multiplexer channels)

## Some Intermediate Miscellany

- Presenting at SHARE in 1982
- 10% development productivity improvement
- First CMOS 9672 field upgrade
- Western Civilization Runs on MVS

# Bob in a 64-bit World

- OS/390 in a 64-bit world at UK GSE
- Amdahl remembered

## Designs – good and bad

- 24-bit LAP TCMs
- How IBM builds a uniprocessor
- Guest survival
- MVS/ESA -3 to +12% performance improvement
- Sysplex polling
- Sysplex Consoles
- WLM is too transparent