**Producing Production Quality Software**

**The FBI's IT**
Prof. Arthur P. Goldberg
Fall, 2005

**Comprehension of terms and ideas**
What is meant by a “validated contingency plan” in par 2 on p. 1?
What are “a full systems integration test and adequate scale, volume, and stress tests” in the last par on p. 1?
What does “reengineer its key processes” in the 2nd to last par on p. 2 mean?
In the 5th bullet on page 6, what does “process map for information sharing” mean?
In the 6th bullet on page 6, what are “denial-of-service attacks”?

**Comprehension of reasoning**
Why does the review believe that the enterprise architecture cannot be “cannot be delegated inside the bureau to the chief information officer (CIO)”?
Isn't the CIO the bureau's senior IT expert?
Why do you think that the “high-speed network and modern workstations and software within each office” part of Trilogy has been more successful than VCF?

**Application of ideas**
How might the “the exchange of comprehensive and timely information” discussed in the last para on p. 24 be incorporated into the FBI's enterprise architecture?
The review recommends a “a limited initial rollout” for the VCF “that would shake out problems in an operational context.” Suppose the VCF had not died and you were designing and planning such a rollout. What parts of the FBI would you want to have participate? How might you estimate how many defects you might expect to uncover during the rollout?
How might you estimate the duration of the rollout and subsequent system modifications?
Design the enterprise architecture for NYU's graduate school of arts and sciences (GSAS). (In particular, focus on the operational architecture.) What are some of the questions we should ask and try to answer to help us design GSAS's enterprise architecture?
For example “What would be similar to the review's Figure 1? What metrics would measure GSAS's 'operational effectiveness'?”
Why do you think the JAD process described in the Spectrum article missed the functionality in the bullet list that starts on the bottom of page 27?
Do you agree with the statement on the bottom of page 33 that “However, the cost of replicated storage is less than the cost of the manpower needed to maintain a single complex system with multiple and potentially contradictory objectives.”.

**Miscellaneous**
Have you been involved in a huge failure like the VCF? If so, can you describe it? In what ways did it differ from this disaster? In what ways was it similar?