

BIBLIOGRAPHY

MATH PUBLICATIONS

Haggerty, M. I., Harvey, R. W., Smith, H. J., Disbrow, J. R.,
MATH(JOSS): Supervisor Unit, ASDD Los Gatos Laboratory, CTS
 Paper No. 20, April 1968.

Harvey, R. W., Smith, H. J., Haggerty, M. I., Disbrow, J. R.,
MATH(JOSS): Input Output Unit, ASDD Los Gatos Laboratory
 CTS Paper No. 21, April 1968.

Smith, H. J., Harvey, R. W., Haggerty, M. I., Disbrow, J. R.,
MATH(JOSS): Central Processing Unit, ASDD Los Gatos Laboratory
 CTS Paper No. 19, April 1968.

JOSS PUBLICATIONS OF CURRENT INTEREST

Baker, C. L., *JOSS: Console Design*, The RAND Corporation,
 RM-5218-PR, February 1967.

-----, *JOSS: Introduction to a Helpful Assistant*, The RAND Corporation,
 RM-5058-PR, July 1966.

-----, *JOSS: Rubrics*, The RAND Corporation, P-3560, March 1967.

Bryan, G. E., *JOSS: Accounting and Performance Measurement*, The RAND
 Corporation, RM-5217-PR, June 1967.

-----, *JOSS: Assembly Listing of the Supervisor*, The RAND Corporation,
 RM-5437-PR, August 1967.

-----, *JOSS: Introduction to the System Implementation*, The RAND
 Corporation, P-3486, November 1966; also published by the Digital
 Equipment Computer Users Society, *DECUS Proceedings*, Fall 1966.

-----, *JOSS: 20,000 Hours at the Console--A Statistical Summary*,
 The RAND Corporation, RM-5359-PR, August 1967.

-----, *JOSS: User Scheduling and Resource Allocation*, The RAND
 Corporation, RM-5216-PR, January 1967.

Bryan, G. E., and E. W. Paxson, *The JOSS Notebook*, The RAND Corporation
 RM-5367-PR, August 1967.

Bryan, G. E., and J. W. Smith, *JOSS Language (Apercu and Precis,
 Pocket Precis, Poster Precis)*, The RAND Corporation, RM-5377-PR,
 August 1967.

Gimble, E. P., *JOSS: Problem Solving for Engineers*, The RAND Corporation, RM-5322-PR, May 1967.

Greenwald, I. D., *JOSS: Arithmetic and Function Evaluation Routines*, The RAND Corporation, RM-5028-PR, September 1966.

-----, *JOSS: Console Service Routines (The Distributor)*, The RAND Corporation, RM-5044-PR, September 1966.

-----, *JOSS: Disc file System*, The RAND Corporation, RM-5257-PR, February 1967.

Marks, S. L., and G. W. Armerding, *The JOSS Primer*, The RAND Corporation, RM-5220-PR, August 1967.

Smith, J. W., *JOSS: Central Processing Routines*, The RAND Corporation, RM-5270-PR, August 1967.

JOSS PUBLICATIONS OF HISTORICAL INTEREST

Baker, C. L., *JOSS: Scenario of a Filmed Report*, The RAND Corporation, RM-4162-PR, June 1964.

"The JOSS System: Time-Sharing at RAND," *Datamation*, Vol. 10, No. 11, November 1964, pp. 32-36. (This article is based on RM-4162-PR above.)

Shaw, J. C., *JOSS: Conversations with the Johniac Open-Shop System*, The RAND Corporation, P-3146, May 1965.

-----, *JOSS: A Designer's View of an Experimental On-Line Computing System*, The RAND Corporation, P-2922, August 1964; also published in *AFIPS Conference Proceedings* (1964, FJCC), Vol. 26, Spartan Books, Baltimore, Maryland, 1964, pp. 455-464.

-----, *JOSS: Examples of the Use of an Experimental On-Line Computing Service*, The RAND Corporation, P-3131, April 1965.

-----, *JOSS: Experience with an Experimental Computing Service for Users at Remote Typewriter Consoles*, The RAND Corporation, P-3149, May 1965.

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