

~~CONFIDENTIAL~~

MINUTES OF THE NSA SCIENTIFIC ADVISORY BOARD MEETING

HELD ON 7 APRIL 1955

1. The following were present at the meeting.

a. Board Members:

Mr. J. C. McPherson, Chairman
 Mr. E. F. Corwith
 Mr. A. W. Horton
 Dr. H. F. Engstrom (arrived 0930)
 Dr. J. von Neumann (arrived 1425)

b. NSA Executive Group for Board Affairs:

Dr. S. Kullback, Vice Chairman
 Mr. A. B. Clark
 Dr. H. H. Campaigne
 Dr. R. A. Leibler

c. NSA Observers:

Major General J. B. Ackerman, USAF
 Brig. General W. M. Burgess, USAF
 Dr. J. J. Eachus
 Dr. H. Nyquist
 Mr. M. M. Matthews
 Mr. G. J. Schiermann
 Mr. J. J. Connelly
 Mr. H. L. Conley
 Mr. H. DeFrancesco
 Mr. D. R. Hogan
 Dr. A. W. Messer
 Dr. R. H. Shaw
 Captain I. T. McDonald, USAF
 Captain R. J. Scott, USAF

d. Recorder:

Miss. C. Johnson

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

2. Mr. Clark opened the meeting by introducing Mr. Conley from FROD.
 - a. Mr. Conley's talk concerned traffic analysis. There followed a brief discussion of the problem of intercepting hand-sent Morse traffic and the difficulties involved in developing a translator to do the job automatically.
 - b. Mr. DeFrancesco of R/D briefed the Board on the intercept of weather information and its strategic value.
3. Mr. Hogan presented a talk on the general features of Analytic machines, with some specific illustrations of their applications.
4. Dr. Hesse gave a presentation on Special Machine Systems.
5. Dr. Leibler described various hand systems of encipherment used and some of the techniques of cryptanalysis.
6. Mr. Hogan gave a survey of analytic machines explaining their various functions.
7. A discussion followed concerning ratings and certain possibilities for improving analytic machines.
8. Dr. Engstrom reported for his Committee on analytical machines.
9. The possible use of machines for automatic programming was discussed.
10. Mr. McPherson presented a report of the Electronics Panel.
11. The meeting adjourned at 1630.

[NOTE: Friday, 8 April, was left as an open date, during which time Board members might study particular subjects of interest. A verbatim record of the Board proceedings and individual reports will be on file in the Office of the Special Assistant for individual study.]

~~CONFIDENTIAL~~