CHIVE/C-215-66
28 September 1966

MEMORANDUM FOR: Director, CHIVE Task Force

SUBJECT: The Utility of COINS I

SUMMARY: This memorandum points out some COINS I
technical problems anticipated by the author, states
his personal opinion on the appropriateness of the
COINS I objectives and his recommendation for the
conduct of the COINS effort.

The programs which are to be written by OCS
Technical Staff for use in the CIA COINS I terminal
will do no "hit processing." This means that records
retrieved by the programs will be output to the user
exactly as they appear in the computer file.

The Soviet Elite Files and the BR Soviet Dossier
Index File all contain variable length records. The
majority of the data items in these records are coded,
i.e., organizations, locations, positions, awards, etc.,
do not appear in clear text, but have been assigned
short, alphanumeric codes instead.

When a COINS I user obtains a printout in response
to a query, he will not immediately be able to use it.
The printout will be a series of letters, numbers
and other symbols which will not be directly intelligible.
In order to deceipher the printout, the user must do
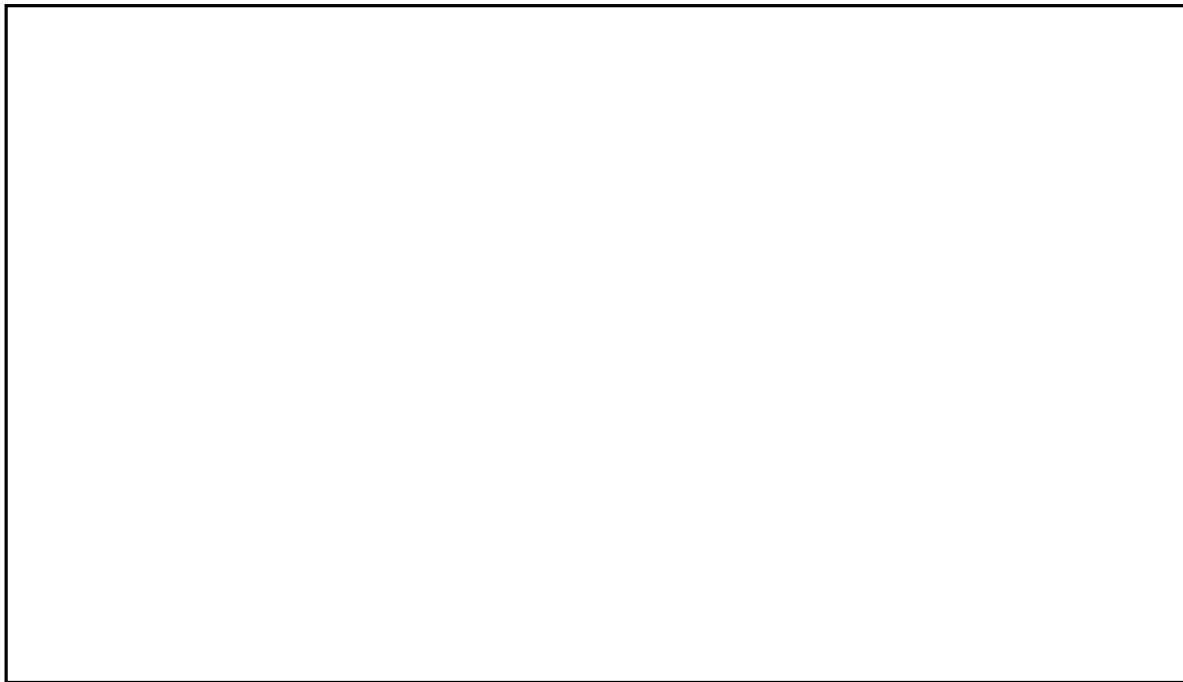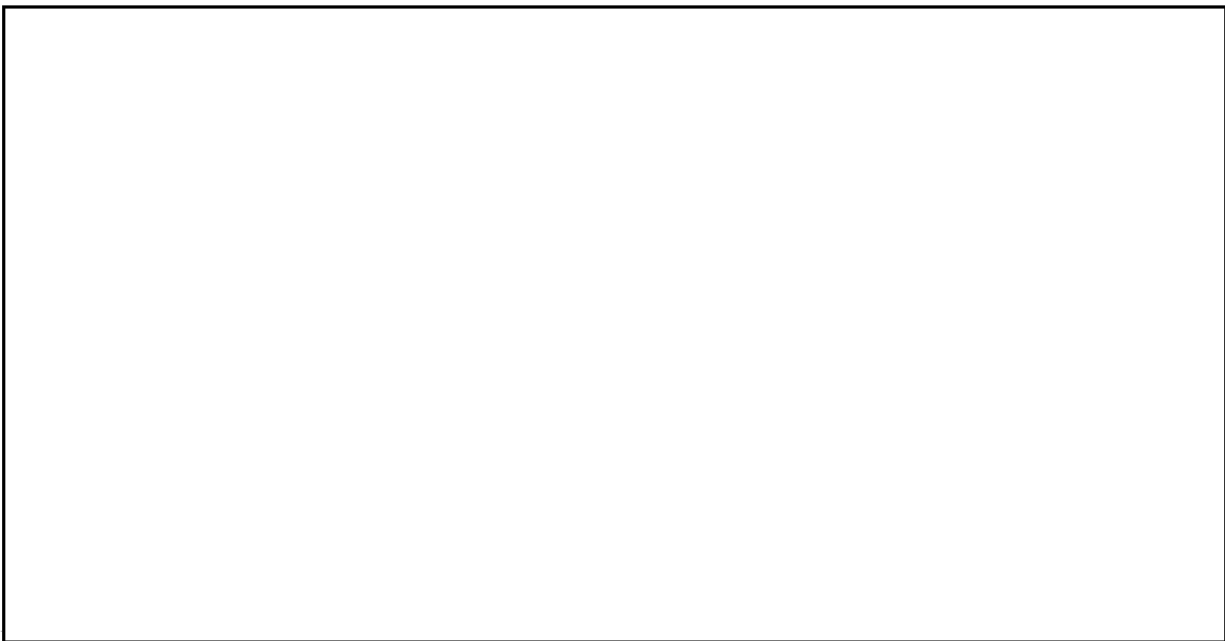the following:

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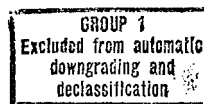
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I think it unlikely that any COINS I user will perform these steps very often.*

It seems to me that there are three different perceptions of the objectives of COINS I. One view is that COINS I should be a means of demonstrating the technical feasibility of a secure network of

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computer systems within the intelligence community.
Another is that COINS I should actually provide an
early increment of capability to exchange useful
data. The third is that the COINS I effort will
establish standards (e.g., transliteration schemes)
and identify areas of duplication which can be
corrected.

The computer programs seem to be oriented towards
the first objective; they provide a demonstration
vehicle. However the Soviet biographic files seem
to have been nominated with the second view in mind;
they could conceivably be used for information exchange.
The COINS Soviet Personalities Panel seems to be
concerned with the third objective.

When reading the COINS documentation*, one can
find all these viewpoints represented. However, I
have serious doubts that the COINS I effort as described
in those documents, or as currently being carried
out, will fulfill any of those objectives, or be of
any other use.

The technical feasibility of a network of computers
cannot be in doubt. Neither can the technical
feasibility of secure linkage be in doubt. The
technical problems of classified data files are real
ones, but they are not being treated in the CIA COINS I
software.

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* COINS Implementation Plan, 25 May 1966,
  CODIB D-113/4.1, page 6, section 7a.

  COINS Implementation Plan Draft, 14 July 1966,
  CODIB D-113/4.2, page 3, section 3a, page 6,
  section c 2, page 7 section c 2 b.

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The Soviet personality files could conceivably be of use to analysts elsewhere in the community, but it is not obvious that their availability via an on-line system (even one which presented them in an intelligible form) makes them more useful. Nor is it obvious that they are the CIA files which could best be used by others in the community.

The COINS Soviet Personalities Panel may succeed in establishing data standards, but it won't use the COINS I system to do this. The Soviet personality files are coming into being without such standards, and no COINS I standards are even contemplated by that panel. COINS I without standards may be a dramatic way of demonstrating the need for standards, but I think this problem will be upstaged by all the other reasons why the system won't work.

Before any COINS I hardware, software or commo gear is acquired, the following steps should be taken:

a) Determine what data files are maintained by community members which are of community-wide interest, and can be released.

b) Determine how these data are, and will be, used, i.e., retrieval capability, retrieval volume, response time, etc.

c) Determine how these data are maintained, i.e., frequency and volume of update, automatic dissemination and/or notification of users.

d) From items a), b) and c), answer the following:

1) On a cost-effectiveness basis, is a network requiring a switching computer, digital links and on-line computers, preferable to less expensive alternatives, e.g., secure telephone, batch processing, and courier delivery?

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2) If so, what are the actual requirements for retrieval capability, e.g., is a search on record ID all that is needed?

3) How much communication capability is required, e.g., are 5000 character records to be exchanged in their entirety, or only selected fields?

4) With a small number of terminals located within a few miles of each other, is a store and foreward switch necessary, or is it less expensive for each terminal to be directly linked to all other terminals and switching be done at each computer?

5) What file maintenance capability should be included in the software, and how will users become aware of changes in the data base?

When these questions are answered, precise operational requirements will exist for COINS, and it can then be decided what increment of the total capability can be provided in phase I.

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