This Division has been authorized to place on war reserve 1,800 SIGCUM. All SIGCUM shall be modified during rehabilitation in accordance with Incl1, wiring diagram ASAM 2-1. The modified SIGCUM will have the nomenclature ASAM 2-1 and new name plates will be provided. All SIGCUM and SIGHUAD presently in the field will be replaced by the ASAM 2-1 as soon as possible, dependent upon the rate of rehabilitation and preparation of the necessary manuals.
1. This Division has been authorized to place in war reserve 1,800 SIGCUM.

2. In order to accomplish this particular phase of the rehabilitation program, it is desired that:
   a. All SIGCUM shall be modified during rehabilitation in accordance with Inclusion 1, wiring diagram ASAM 2-1.
   b. The modified SIGCUM will have the nomenclature ASAM 2-1 and new name plates will be provided.
   c. All SIGCUM and SIGMAK presently in the field will be replaced by the ASAM 2-1 as soon as possible, dependent upon the rate of rehabilitation and preparation of the necessary manuals. Thirty of these modified SIGCUM should be equipped with synchronous motors, the remainder should have universal motors.
   d. One thousand eight hundred of these modified SIGCUM will then be packaged in accordance with the crypto-equipment packaging program. Four hundred of the 1,800 modified SIGCUM should be equipped with synchronous motors, the remaining should have universal motors.

3. It is necessary that this modification and rehabilitation program be initiated as soon as possible and that it be assigned the highest priority.

4. Information is requested as to the estimated starting date, the number of units that will be completed within the first three semianual periods, and date of completion of maintenance and procedural manuals.

A. SIGKOV
Chief, Security Division
The following information in connection with the rehabilitation and revision of the SIECUM is furnished for the information of all concerned in the planning of this project.

a. The rehabilitation and revision of the SIECUM to the ASAN 2-1 will be assigned one project number. The packaging of ASAN 2-1 units for long-term storage will be assigned a different project number.

b. The 550 SIECUM units now in the vault at New Cumberland will be processed first. Exact details as to the quantities desired on specific dates will be coordinated with Captain Toner.

c. Property issue slips will be submitted to Supply Branch before 1 October 1948 for all items required on this project.

d. The project will be started on 1 December 1948. This delay is owing to the time required to secure the items not presently in stock.

e. As of 1 December 1948, approximately twenty-five repairmen will be assigned to the project.

f. It is estimated that fifty-five hours will be required to convert each unit or approximately three years to complete the project. The estimated rate of production during the first three semiannual periods is:

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of ASAN 2-1 Completed (Cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 June 1949</td>
<td>360</td>
</tr>
<tr>
<td>1 December 1949</td>
<td>720</td>
</tr>
<tr>
<td>1 June 1950</td>
<td>1080</td>
</tr>
</tbody>
</table>

g. It is estimated that the maintenance instructions for the new unit will be in final form to submit to AS-82 for printing on 1 December 1949.

K. KUHN
Chief, Maintenance Branch
1. A document, ASAM 2-1/1 for operation of the ASAM 2-1 both in normal usage and in one time operation is nearly completed. It could be distributed by 1 January 1949 easily.

2. Mr. Kuhn has expressed the opinion, in which I concur, that the machines should not be issued without new maintenance manuals, which he indicates in his paper will not be ready to go to the printer until 1 December 1949, at which time 720 machines will have been finished. All of this means that there will be no 2-1's in use until February or March 1950, (except for the 20 in Hawaii).

3. This Branch was one of the sponsors of the 2-1 movement because of particular concern over the security of our own ASA intercept outfits. We recommended immediate replacement of their present SIGCUM's as soon as 2-1's were available. I would like to repeat this recommendation and ask that as many of the first 360 as are required to replace equipments at ASA stations be distributed as soon as produced. These could be accompanied by an addendum to the present SIGHORY containing test procedure and circuit diagrams. (Note — the circuit diagrams at least will be required for the 20 in Hawaii.)

FRANK C. AUSTIN
Chief, Methods Branch

1 Incl
n/c
AS-85  AS-80  6 Oct 48  War Reserve Stocks

Mr. Brann  Ext 388

1. It is believed necessary that the replacement of the SIGCUM now in the field by ASAN 2-1 be initiated prior to 1 January 1950; therefore, it is believed advisable for AS-85 to consider the preparation of change sheets to SIGOBY, in order that an interim manual may be provided, and so that replacement will be contingent only upon the rate of rehabilitation as estimated in subparagraph f of Comment 2.

2. It is also believed advisable that this interim manual accompany the twenty ASAN 2-1 tentatively scheduled for installation in the tactical net Hawaii in January 1949.

1 Incl  

n/c  

4. JINKOV  

Chief, Security Division
1. In compliance with Action 4, Change Number 2 to SIRQHBY has been printed and is ready for distribution.

2. At present, all copies are in the possession of AS-82 who have been instructed to issue Change Number 2 to SIRQHBY with each ASAM 2-1 issued.

I. KEMP
Chief, Maintenance Branch