SECRET-CRYPTO

CRYPTOGRAPHERIC EQUIPMENT
PLANNING AND REFERENCE
GUIDE (U)

CSP 6620A

DO NOT REMOVE FROM BINDER

DECLASSIFIED per SEC 3.4 E.O. 12063
by Director, NSA/Chief, CSS

ORIGI NAL
(Reverse Blank)
AN/SGA-4
A configuration of teletypewriter and ancillary equipment designed expressly for shipboard use to provide full duplex on-line operation in the Python one-time tape cryptosystem, (may also be used off-line), it is capable of providing security for point-to-point (or netted) single channel radio or wireline circuits. Its crypto unit is a special transmitter distributor (CSP-2699) using one-time tape and the SSM-33 signal mixer unit. Operating speed is 45.5 baud (60 wpm). (For further information see the CSP-2699 and SSM-33 sections).

The CSP-2699 and the SSM-33 have highly undesirable radiation characteristics. As rapidly as feasible they will be replaced by the HW-10 and HW-19A equipments.

The complete configuration consists of the following components:

1 - PP-1646A/UG - power supply
2 - TT-57/FG - transmitter distributors
2 - TT-159/UG - model 14 typing perforators
2 - TT-47/UG - model 25 teletypewriters
1 - SSM-33 - signal mixer
2 - CSP-2699 - special one-time tape transmitter distributor (used with but not supplied as a part of the AN/SGA-4) (RPS distributed)

Secret-Crypto

Status

IN USE.

Training

No specialized training required.

Cryptography

Python

Classification

Equipment: unclassified
Keying material: secret-crypto
Traffic: limited to secret and below because of the undesirable radiation characteristics of the CSP-2699 and SSM-33.

Publications

Maintenance: CSP-2699; MTO-11-2222 (ARMY DESIGNATION FOR THE CSP-2699 IS TT-21/FG (SIGTOT))

Operating: CSP-2899; WAG-4 (SECRET CONFIDENTIAL-CRYPTO)

Procurement

See pages pertaining to component equipments

<table>
<thead>
<tr>
<th>Component</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
<th>Voltage</th>
<th>Power</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP-1646A/UG</td>
<td>7 in.</td>
<td>19 in.</td>
<td>9 in.</td>
<td>41 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT-57/FG</td>
<td>9 1/2 in.</td>
<td>8 3/4 in.</td>
<td>16 3/4 in.</td>
<td>30 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT-159/UG</td>
<td>12 3/4 in.</td>
<td>18 in.</td>
<td>21 1/2 in.</td>
<td>70 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT-47/UG</td>
<td>40 1/2 in.</td>
<td>20 1/2 in.</td>
<td>18 1/2 in.</td>
<td>120 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSM-33</td>
<td>10 1/2 in.</td>
<td>19 in.</td>
<td>8 in.</td>
<td>25 lbs.</td>
<td>115</td>
<td>230 watts</td>
<td></td>
</tr>
<tr>
<td>CSP-2699</td>
<td>8 1/2 in.</td>
<td>15 in.</td>
<td>9 in.</td>
<td>28 lbs.</td>
<td></td>
<td>1056 watts</td>
<td>A complete AN/SGA-4 configuration requires approximately 75.5 cubic feet.</td>
</tr>
<tr>
<td>Total</td>
<td>742 lbs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Physical characteristics

(Major components)

Corrected to 5/26/62