USASA Reg 105-13

DEPARTMENT OF THE ARMY
UNITED STATES ARMY SECURITY AGENCY
Arlington Hall Station
Arlington, Virginia 22212

Regulation
No. 105-13

25 September 1973

Communications-Electronics

STANDARD CRITERIA FOR SUPERVISION AND EMPLOYMENT OF USASA DIRECTION FINDING TECHNIQUES (U)

Section I

GENERAL

1. PURPOSE. This regulation provides the standard criteria for supervision and employment of USASA Direction Finding (DF) Techniques [redacted]

2. SCOPE. This regulation applies to all USASA organizations and units engaged in or responsible for supervision of USASA DF activities world-wide. This is a basic document which is augmented by additional regulations pertaining to specific areas of operations that are given treatment in this document.

*This regulation supersedes OTD 61-1, 8 March 1963.

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Section III

RESPONSIBILITIES

5. HEADQUARTERS, USASA. Heads of Staff elements concerned will maintain staff supervision and guidance over the USASA worldwide DF programs through review of selected technical and operational information provided by field activities. In addition, necessary liaison and studies will be conducted to insure that the programs remain abreast of the advancing technical sciences.

6. SUBORDINATE ELEMENTS. Each USASA field element having DF will be responsible for the control, processing, evaluation and reporting of the efforts employed. The day-to-day operation and timely recognition and correction to problem areas are the responsibility of the field elements. When problems identified are beyond the capabilities of field elements to correct, assistance is to be requested from this Headquarters.

7. LIAISON VISITS. DF representatives from this Headquarters will visit each DF control, DF tasker and each DF outstation at least once each fiscal year. The DF net control officer is responsible for the technical, operational and tasking control of all DF sites within the net. Therefore, he and/or the DF net control NCOIC will visit every outstation in the net at least once every three months. If a SIT technician (WO, MOS 053A) is assigned to the parent organization of a DF site, the SIT technician and/or his NCOIC will visit each subordinate DF site on a monthly basis to perform a technical inspection of the site and provide assistance as required. When problems concerning performance of outstations arise, net control will advise the parent organization of the DF site and will also provide technical assistance as required to correct the problem.

Section IV

OPERATIONS

8. GENERAL. The OIC of the DF net control will insure that -

a. [redacted]

b. Effective control procedures to respond to requests for DF support prevail at all times. [redacted]

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[redacted]

Regardless of the origin of a task, it is the responsibility of the requester to state the task objectives. DF supervisory personnel must insure that a valid requirement exists commensurate with the task objectives and capabilities of the DF net to which the task is assigned. The DF officer is responsible to adjust the tasking in order to obtain the best DF results possible.

d. DF information data collected is expeditiously supplied to the requester in a finished and usable form. He will provide immediate response to any [redacted] when the DF mission [redacted] Analytical support will be provided on a timely basis and in the form of complete recapitulations and/or summaries in accordance with local procedures.

9. OPERATIONS. USASA DF net operations have a 24 hour response capability and will include a DF controller/coordinator and facilities for the collection and processing of DF information.

a. DF Controller. The DF controller will coordinate the activities between DF [redacted] facilities and control the flow of requests for DF information in accordance with current mission assignments. At stations equipped with computers for mission control functions, the control of the flow of requests for DF information will be immediately processed in accordance with programs written specifically for that computer operation and in accordance with mission control concepts.

b. Direction Finding. The OIC of DF Net Control stations will be delegated with operational tasking control and technical supervision of all DF outstations within his respective net. Adequate audio intercommunication [redacted] facilities, to include signal piping, will be established between [redacted] DF net control facilities. Optimum procedures will be employed to insure rapid and secure handling of DF traffic. Separate DF flash and report communications will be maintained and operated in accordance with existing directives contained in OTD 61-4 or successor documents when using continuous wave (CW) operations. A combined flash/report facility will be utilized for on-line teletype (TTY) operations. The following outlines specific functions of the DF effort.

(1) DF Flash Circuit Operations. The flash circuit will be utilized by Net Control Stations, alternate Net Control Stations (where applicable), or by designated flash stations, and will normally be reserved exclusively for the transmission of flashes or directives regarding [redacted] signals to the remainder of the net. Each designated control or flash station must be capable of simultaneously passing traffic to all other stations in the DF net via the flash circuit.

[redacted]

(2) DF Flash Position. The flash position provides a means for the transmission of pertinent [redacted] data to the DF net. Transmission of the flash data and tracking [redacted] will be in accordance with existing USASA directives or successor documents for both on-line teletype and radio CW operations.

(3) DF Report Circuit Operation. The report circuit is the intranet communications channel used primarily for the return of bearing observations to the net control or alternate control (if applicable). This circuit will be used by the net control as a means of exercising operational control over the net and for the transmission of operational/administrative traffic pertinent to [redacted] units supported by the net. If adequate report circuits have not been provided for this purpose, an alternate means of communications, such as the DF flash circuit, may be used for this purpose on a non-interfering basis.

(4) DF Report Position. The report position provides a means for maintaining control over the DF report net and the receipt of bearing returns. Report circuit operations and bearing return formats will be in accordance with existing USASA directives or successor documents.

(5) Plotting and Evaluation. Processing and evaluation of DF results will be accomplished by the plotting/evaluation section in accordance with current directives. Where communications facilities permit timely forwarding of fix results from the designated net control to the flash originator(s), all plotting will be accomplished by the designated Net Control Station. Computer plotting will be accomplished in accordance with programs written for the system utilized and will not be altered in any way by field units without written approval of this Headquarters. The following provides procedures/guidance to be utilized when performing manual plotting evaluation:

[redacted]

(a)

(b) [redacted]

(c) [redacted]

(d) [redacted]

(e) [redacted]

(6) DF Outstations. The OIC of DF Net Control Stations will insure the following procedures will be adhered to in order to insure that each DF outstation achieves optimum performance on a continuing basis.

(a) DF Site Installation. Each DF site outside the CONUS will be tested and installed in accordance with TECHINS 1050, USASA Regulation 105-11 or successor documents, and appropriate equipment instruction manuals.

(b) Outstation Supervision. Each USASA DF outstation will be supervised by an experienced DF NCO. The DF outstation supervisor is responsible for insuring that his particular facility is meeting required standards and performing at maximum operational efficiency on a continuing basis. The administration and supervision of USASA Direction Finding sites will be accomplished in USASA Regulation 105-11.

10. MISSION CONTROL. a. General. DF tasking will be accomplished in accordance with TECHINS 1056 or successor directives.

(1) The DF officer will be responsible for the operational and technical control of the DF mission.

(2) Local and analytic or mission control officers will be responsible for keeping the DF officer informed [redacted] information desired and the relative priority to be assigned each mission.

(3) [redacted]

(4) The DF sections will be responsible for obtaining the desired results and forwarding the product obtained to the appropriate consumer as required on a timely basis.

(5) Analytical section chiefs and mission control personnel will constantly review the DF assignment to determine if any deletions, or changes in relative priorities, should be made. The DF officer will periodically review the DF mission and nominate appropriate tasking adjustments or deletions as required.

(6) If any additions, deletions or priority adjustments are required, the analytical section chiefs or mission control officer will submit to the DF section [redacted] deleted or adjusted outlining the specific mission objective and relative importance of the task [redacted] for DF support.

b. DF Controller. All information concerning mission activity will originate with the station [redacted] sections. In those instances where an automated computer [redacted] system is utilized, the queuing [redacted] will be in accordance with the program written specifically for the device employed. For operations where no computer system is installed, the [redacted] trick chief, in cooperation with the DF controller, is responsible to insure that the DF section [redacted]

(1) [redacted]

(2) In automated situations, appropriate computer program procedures will be followed by the DF controller.

c. Direction Finding. When notified of computer queue or when notified by the DF controller of activity for a DF mission, the DF flash operator will handle the [redacted] in the following manner:

(1) If a mission of higher precedence is currently in progress on the net, the flash operator will so notify the DF controller. [redacted] flashes as a result of computer queuing will be handled on a priority first-in first-out basis.

(2) If a mission of lower priority is in progress, gaining control of the net will be as prescribed by OTD 61-4 or successor documents.

(3) If no mission is currently in progress on the net, the alert and transmission of the flash will be as prescribed by OTD 61-4 or successor documents.

(4) Immediately after the flash has been terminated, the DF outstations will be requested to transmit their observations to the control station by the DF report circuit.

(5) As soon as all DF outstations have returned the bearing observations to the DF control, the DF analyst will plot the mission in the most expeditious manner so that results can be channeled back to the DF controller on a timely basis. Computer Fix Computation (FIXCOM) programs will be utilized when station facilities permit and processing will be accomplished on a real-time basis.

11. MISSION RESULTS. DF results will be reported in the format and vehicle prescribed and authorized by NSA. Mission results and feedback on each mission will also be provided to [redacted] When station computer facilities exist or when manual preparation permits, the DF section will provide local support as follows:

a. Daily recap of tip-off activity.

b. Daily recap of DF flash, line of bearing, and fix location activity.

c. Periodic consolidated fix listing.

d. Periodic Mission Management File Surveys.

The proponent of this Regulation is the Deputy Chief of Staff Operations. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications) to this Headquarters, ATTN: IAOPS.

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