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The National Sigint Operations Center (U)

Introduction (U)

~~(S-CCO)~~ The Sigint System provides our nation the capability to monitor systematically and reliably the electromagnetic signals and communications of target countries throughout the world. Inherent in the system is the capability to generate and disseminate rapidly time-sensitive critical indications and warning and current intelligence information. Within the national intelligence community, the value and uniqueness of this capability has been demonstrated during virtually every major international crisis in recent years. In addition to such periods of crisis, Sigint contributes immeasurably to current, standing, and longer-term intelligence requirements. This is accomplished as a result of the analysis, reporting, and dissemination of Sigint information to users worldwide under a dynamic and responsive system of time-sensitive Sigint operations.

~~(S-CCO)~~ The National Sigint Operations Center (NSOC), the Agency's current operations center, is the focal point for time-sensitive Sigint analysis and reporting at NSA and within the United States Sigint System (USSS). Much more than a "watch center," NSOC is the authoritative center for dynamic management of time-sensitive Sigint operations. Hence, within the national intelligence community, NSOC represents a unique capability, for it is the only organization of its kind involved in, and responsible for, time-sensitive activities by a total national intelligence system. The evolution of NSOC and its operations represents a significant chapter in the growth of the U.S. Sigint System; this article traces the development of NSOC and describes its mission, functions, organization, operations, support systems, and relationships with other similar centers.

Genesis of a National Center (U)

~~(S-CCO)~~ The concept of a single focal point for current Sigint operations derived from NSA's experi-

ence during the crises of the 1960s: Cuba (1962), [REDACTED] Middle East (1967), Korea/Pueblo (1968), Czechoslovakia (1968), and Korea/EC-121 shootdown (1969). Geographically, these crises—and others which could be cited—touched almost every continent. In terms of NSA organization, they impacted upon and involved virtually every major production group. Notwithstanding the significant response and contributions of the USSS during these crises, it became apparent that the potential of the Sigint System could be enhanced immeasurably through the establishment of a central current operations and crisis-management organization.

~~(S-CCO)~~ Accordingly, in the wake of the crises of the 1967-1968 period, the Assistant Director for Production (ADP) proposed that the Director, NSA, consider the establishment of a National Sigint Watch Center.¹ This embryonic concept envisioned the national center as "the true hub of each watch activity now conducted by the analytic groups separately."² The national center would be "connected by secure audio and video links with each of the truly key national principals, providing real-time display of the world situation, and particularly, detailed coverage of developing incidents."³ Sigint experts staffing the center would be available to provide an immediate response to the President, Secretary of State, and other senior Government authorities. Commensurate with this critical responsibility, the national center, it was

¹ ~~(S-CCO)~~ At this time the ADP was Major General John E. Morrison, Jr., USAF, who served in this position until February 1973. In a very real sense, General Morrison was the father and founder of NSOC. In July 1973 the ADP was designated Deputy Director for SIGINT Operations (DDO).

² ~~(S-CCO)~~ ADP memo, Subject: Proposal for National SIGINT Watch Center, dtd 9 Dec 68. From an organizational perspective, responsibility for current Sigint operations was diffused. From September 1963 there had existed the NSA Command Center, which was essentially a watch-type element for the Production Organization. Then in 1967, a Current SIGINT Operations Center (CSOC) was established at NSA as a mechanism for current Sigint surveillance of Soviet and European communist targets. CSOC became the prototype for, and comprised the nucleus of, NSOC.

³ (U) Ibid.



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The Door to the National Sigint Operations Center

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suggested, would be staffed with senior watch personnel of general officer and supergrade level.

EC-121 Incident—Coupe de grace (U)

~~(S-CCO)~~ Four months following the articulation of this concept, on 15 April 1969, the EC-121 incident provided another—and especially compelling—illustration of the requirement for a national center. Urgently summoned and requested to report to the Command

Center to assume personal direction of the situation, ADP recalled later:

I saw our separate enclaves, perhaps at their worst. In this incident we had to come to grips quickly with Soviet, CHICOM, and North Korean [redacted] information flowing into several centers, separated by what seemed to me in the early morning hours, enormous distances.⁴

⁴ ~~(S-CCO)~~ ADP Memo, Subject: National SIGINT OPS Center (NSOC), dtd 5 May 72.

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This single incident had underscored the deficiencies inherent in the fragmentation and diversity which characterized the prevailing approach to current Sigint operations.⁵

~~(S-CCO)~~ On 17 July 1969, the Director concurred in the establishment of such a center, which was referred to as a "National Sigint Operations Center". In addition, the Director requested that a statement be developed, describing the mission and functions, manpower, equipment, and other resources required to operate the center on an around-the-clock basis. On 25 July, ADP directed that a plan be developed for presentation to the Director by 1 September 1969. The September 1969 concept paper embodied the broad outlines of the present NSOC, especially in the definition of mission and functions. However, there were other kernels of hope and imagination which would not germinate in the light of resource and bureaucratic realities.⁶

Plan for an NSOC (U)

~~(C)~~ Detailed planning for NSOC was beset by a variety of problems, perhaps the foremost being the identification of a suitable location. On 26 May 1970, ADP indicated that space then occupied by the communications-relay facility would be available for NSOC during 1971. Two days later, the ADP directed that a detailed plan and program be developed for presentation to the Director as soon as possible. Such a plan was presented to ADP on 14 August 1970. A further refinement of this plan was issued in November 1970.

Implementation of a Concept (U)

~~(C)~~ For more than a year, implementation of the concept for the National Sigint Operations Center was delayed. The programmed space did not become available as scheduled. Of no less significance, there remained some who, at most, were less than enthusiastic about the concept and its potential im-

⁵ ~~(C-CCO)~~ Current Sigint was defined as "that information which is sufficiently timely to warrant electrical release to customer agencies." Subsequently, it became more conventional to refer to this information as "time-sensitive" Sigint.

~~(C-CCO)~~ Specifically, among the ideas which did not materialize were: organization at key-component level with six line offices; customer and SCA representation; location near DEF-SMAC; designation of manager as Director; three-year tours for staff, who would be administratively and operationally subordinate to the Director, NSOC.

plications, if executed as outlined. In this regard, ADP recalled that:

There are many who applaud the idea of pulling together our many watches and thereby give the National Security Agency a chance to present the full of coherent management to our worldwide collectors as well as our customers. There are some who resist the change, but then there are always those who resist change.⁷

Nevertheless, the concept was kept alive. In establishing a task force for the relocation of the CSOC to the communications area, during February 1972, ADP specifically directed that such planning and programming accommodate an NSOC.

~~(C)~~ On 4 May 1972, Dr. Louis W. Tordella, Deputy Director, NSA, requested that ADP submit his current views on the proposed NSOC. ADP responded on 5 May, and underscored the following salient points:

a. CSOC would become the first component of the NSOC, concurrent with its relocation to new quarters. Representative elements from other offices and the NSA Command Center would be phased in over a period of some ten months, or perhaps earlier.

b. NSOC would be a confederation with ADP exercising over-all management and control and the Chiefs of the Production Groups exercising responsibility for the caliber of their workers and the quality of their activities.

c. Each NSOC shift would have approximately personnel, all from current authorization, and would be supervised by a Senior Operations Officer, probably grade GS-15 or military rank of O6, who would serve in that capacity for approximately one year.

d. Under NSOC, all OPSCOMS terminals would be centralized.

~~(C)~~ On 17 May 1972, the Deputy Director approved the proposal in principle and as the basis for working out the details. He noted, however, two reservations: that the estimate of personnel per shift may prove to be unnecessarily large for all watches, and that some accommodation would probably be necessary in regard to the consolidation of all OPSCOMM circuits.

~~(C)~~ On 11 July 1972, ADP formally promulgated terms of reference and announced the crea-

⁷ ~~(C-CCO)~~ ADP Memo, Subject: National SIGINT OPS Center (NSOC), dtd 5 May 1972.

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tion of a Task Force to implement the establishment of the NSOC.⁸ The first meeting of the Task Force occurred on 11 August. Within less than a month a coordinated, proposed charter was ready for ADP review and approval. On 15 September, ADP approved the charter and announced the formation of an NSOC cadre staff under the leadership of the former Task Force Chairman. Meanwhile physical rehabilitation of the NSOC spaces proceeded apace. By early November, sufficient OPSCOMM equipments had been installed to facilitate activation of the first block of approximately 45 circuits. By December 1972 NSOC had achieved an initial, albeit limited, operational capability.

~~(S)~~ The NSOC was inaugurated formally with a ribbon-cutting ceremony on 21 February 1973. In a formal message announcing this event, the Director observed: "The National Sigint Operations Center, although still evolving, is a significant milestone in the continuing development of a coherent and responsive Sigint System for the United States."⁹ By the fall of 1973, which witnessed the Yom Kippur War, NSOC had become a fully operational center.

NSOC Mission and Functions (U)

~~(S-CCO)~~ NSOC has a dual mission which encompasses management of time-sensitive Sigint activities



The National Sigint Operations Center

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⁸ ~~(S)~~ The Chief of this Task Force was Mr. Charles R. Lord, who subsequently became the first Chief of the DDO Current Operations Element, responsible to ADP for the daily management of the NSOC.

⁹ (U) DIR/CH-21-73 DTG 211954Z Feb 73.

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and time-sensitive Sigint analysis and reporting. The over-all purpose and goal of the Center is to ensure that the U. S. Sigint System is operating in an optimum mode in satisfying requirements for time-sensitive Sigint.

~~(S-CCO)~~ The cryptologic management responsibility of the NSOC comprises the following critical functions:

- *Maintain cognizance of over-all posture and status of collection systems and activities* ~~(S-CCO)~~

~~(S-CCO)~~ As the current operations center for the USSS, NSOC keeps abreast of the posture and status of the various collection systems and activities. The Center is cognizant of the specific mission and targets assigned to component collection activities, including fixed conventional collection sites, mobile collectors, and [redacted]. In addition, NSOC is constantly aware of developments and events which affect the capability of these systems and activities to accomplish assigned missions. In the event of a problem or difficulty, NSOC ensures that appropriate action is taken to offset or minimize the impact on time-sensitive collection.

- *Provide guidance and support to field stations to facilitate mission accomplishment* ~~(S-CCO)~~

~~(S-CCO)~~ An especially important function of the Center is to provide guidance and support to collection activities in such a manner as to facilitate mission accomplishments. Perhaps the foremost responsibility in this regard is the alerting of stations to anticipated significant developments with respect to their target area. A concerted effort is made to ensure that collection activities are informed as soon as possible of those developments reported in non-Sigint (collateral) sources which are generally unavailable at the station. In addition, NSOC provides technical support,

[redacted] and other forms of technical assistance. Resident within the Center are senior cryptologic officers who can advise stations on reporting policies and guidance.

~~(S-CCO)~~ Support to collection activities is provided both informally and formally. Informal support includes analyst-to-analyst or other individual-to-individual conferences, which can occur instantaneously at the request of either the station analyst/reporter or NSOC. On a more structured basis, this support is available and is provided through an automated query/response, management-information system which pro-

vides a mechanism for field activities and Sigint users to submit formal queries, indicating to NSOC the general time frame in which a response is required. For example, a query with a "Priority One" requires an NSOC response within two hours, a "Priority Four" query requires a response within seventy-two hours.

- *Ensure appropriate adjustments within USSS in the event of an emergency situation* ~~(S-CCO)~~

~~(S-CCO)~~ Sigint activities may experience emergency conditions resulting from [redacted]

[redacted] or other critical developments. An emergency condition may also be caused by developments not resulting from [redacted]

[redacted] which disrupt Sigint operations. In accordance with existing operational directives, Sigint activities report immediately such emergency conditions which adversely affect collection operations. [redacted]

[redacted] Upon the receipt of such notifications, NSOC ensures that all concerned are made aware of the temporary impairment and that appropriate actions, such as the implementation of alternate collection plans, are accomplished.

- *Optimize Sigint collection in anticipation of, or in response to, high-interest situations* ~~(S-CCO)~~

~~(S-CCO)~~ For particularly fast-breaking developments, NSOC also assures that Sigint collection is optimized to provide maximum coverage of pertinent target communications. Hence, the Center must keep abreast of the current collection mission and tasking of each Sigint activity. NSOC is also made aware of planned changes in the USSS collection effort against target developments of high interest. Generally, optimization is effected through an advisory-type message informing appropriate Sigint activities of an anticipated or actual event which could be reflected within the assigned mission and tasking of the recipients. These "tippers" or "heads-up" messages may be triggered by either Sigint or non-Sigint information. On the other hand, NSOC does have the responsibility and the authority to task Sigint activities more directly, and to augment the posture of the USSS in the over-all adjustment of the Sigint System, under

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contingency and critical situations requiring a reflex response.

- *Serve as the focal point for crisis management* ~~(S-CCO)~~



~~(S-CCO)~~ As indicated previously, a major catalytic force in the genesis of NSOC was NSA's experiences during the crises of the 1960s. Consequently, NSOC is vested with responsibility to serve as the crisis management center for the Agency and the USSS. In this regard, NSOC exercises executive agent and over-all coordination of CRITIC¹⁰ reporting.

- *Prepare, review, and release time-sensitive Sigint product* ~~(S-CCO)~~

~~(S-CCO)~~ NSOC analysts routinely produce some Sigint reports and as required, also initiate and prepare non-routine reports. The Center is responsible for preparing and releasing time-sensitive reports which require the fusion of information from more than a single Group, and for ensuring that a single, complete report is provided the user. Normally, however, the bulk of NSA product is prepared within the various elements of the Production Organization and sent to NSOC for review and release to customers in response to their expressed and validated requirements.



NSOC closely watches international developments throughout the world, affording particular attention to potential crisis situations. As a crisis or contingency develops, NSOC serves as the focal point for NSA actions, keeping abreast of Sigint reporting and collection optimization efforts.

NSOC Organization (U)

~~(S-CCO)~~ Organizationally, NSOC comprises the core divisions within the Office of Operations and Current Reporting. To facilitate and enhance NSOC operations, this office also includes a general support and automation and communications support division. The Center comprises five operations teams or divisions, each staffed and structured in the same manner. Within this structure there is a management-staff cadre who collectively constitute the management team for each operational division or "watch," and contingents of analysts and reporters who are specialists for the major Sigint targets. These contingents are staffed, supported, and supervised by the various production groups. In addition, each team is supported by communications and computer systems specialists.



~~(S-CCO)~~ Of equal importance are those NSOC functions which relate directly to the over-all responsibility as the focal point for time-sensitive Sigint analysis and reporting.

- *Maintain cognizance over time-sensitive Sigint System reporting* ~~(S-CCO)~~

- *Senior Operations Officer (U)*

~~(S-CCO)~~ NSOC maintains continuous awareness of reporting on Sigint targets which are potential sources of strategic indications and warning intelligence information.

~~(S)~~ Over-all direction and coordination is provided by the Senior Operations Officer, called the "SOO". A professional cryptologist with extensive Sigint experience and expertise, the SOO is responsible for the daily operations of the Center. The SOO maintains close awareness of intelligence and other developments and ensures that appropriate action is taken to resolve problems. Matters of cryptologic management and policy are referred to the SOO for consideration and ultimate decision. The SOO maintains a general awareness of current situations of high intelligence community interest.



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The Office of the Senior Operations Officer

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• *Senior Reporting Officer (U)*

~~(S)~~ The SRO, or Senior Reporting Officer, is the senior editor and intelligence officer who, specifically, maintains an awareness of the world-wide Sigint time-sensitive reporting effort. As such, the SRO is the primary advisor and staff officer for matters relating to reporting policy and guidance. The most demanding function of this officer is the review and release of all Sigint product disseminated electrically. In addition, the SRO continually reviews Sigint reports from the world-wide system and selects those which should be brought to the attention of senior Agency officials.

• *Surveillance and Collection Officer (U)*

~~(S)~~ The Surveillance and Collection Officer (SCO) focuses primarily on operational and technical matters related to the over-all Sigint System. Specifically, the SCO's main concern is the status and posture of the Sigint collection system. Within the Center, the SCO is the focal point for current information related to the tasking of resources, contingency collection adjustments, airborne Sigint reconnaissance program (ASRP) operations, and other sensors. The SCO keeps aware of actions taken to resolve problems which affect the over-all performance of collection systems and keeps the SOO informed of major system

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outages. The SCO also monitors NSOC responsiveness to queries and requests for assistance from Sigint activities. The SCO maintains a close relationship with the Operations Project Officer (OPO), who is responsible for special systems collection activities.

• *Operations Support Officer (U)*

(U) The principal assistant to the SOO is the Operations Support Officer (OSO), who handles a wide variety of administrative and support functions essential for the efficient functioning of the Center. The OSO scans the large volume of incoming traffic which reaches the SOO from various sources. As a result of the OSO filtering, the SOO receives that information which requires notation or action in regards to significant situations. The OSO also assists the SOO in advising senior NSA officials and others of intelligence or operational developments requiring their immediate attention.

• *Systems Officer (U)*

~~(S)~~ The Systems Officer (SYO) ensures the continuous and unimpeded flow of time-sensitive Sigint through automated processing and dissemination systems. The SYO, assisted by a systems support element, monitors the status of computer-support systems and takes appropriate action to resolve problems immediately. He also provides quality control of data inputs, system support to NSOC personnel and Sigint activities, and the development and implementation of time-critical systems support actions.

• *Communications Watch Officer (U)*

(U) Each NSOC operations team is supported by a communications element which is supervised by a Communications Watch Officer (CWO). The CWO is responsible for (a) routing and distributing all incoming messages; (b) processing outgoing traffic; (c) keeping abreast of the status of communications circuits dedicated to the support of time-sensitive Sigint activities; (d) maintaining cognizance over special communications facilities; (e) ensuring security of crypto-equipment and documents; and (f) advising the SOO on communications support matters.

• *NMCC Representative (U)*

~~(S)~~ Assigned to each team is an NSA Representative within the National Military Command Center (NMCC) at the Pentagon. The NMCC Repre-

sentative provides on-the-scene cryptologic support to the NMCC, ensuring that significant Sigint product is brought immediately to the attention of the general or flag officer on duty as the Deputy Director for Operations. The Representative also responds to queries concerning Sigint product and the capabilities and posture of the USSS. During contingencies and crisis situations, the NMCC Representative provides an optimum channel for the mutual rapid flow of information between the NMCC and NSA.

• *Information Services Officer (U)*

~~(S)~~ Available within the NSOC is around-the-clock informational support, which is provided by a cadre of Information Service Officers (ISO), one assigned to each of the NSOC teams. The ISO scans [redacted] and provides other general [redacted] information support to the NSOC team. The ISO, in addition, provides information reference service, using not only sources which are available within the NSOC, including computerized data bases and files, but also external resources as well. The services provided by the ISO are not limited to NSOC; other NSA activities operating around the clock and field Sigint activities also use these services.

• *Senior Group Coordinators (U)*

~~(S-CCO)~~ The backbone of the Center is the cadre of target analysts and other specialists whose activities are coordinated by a senior analyst called the Senior Group Coordinator (SGC). Within each team there is a SGC for each of the analytic groups represented in NSOC, providing coverage of the USSR/European Communist, Asiatic Communist, and other targets, including the Middle East, [redacted]. Within these analytical group clusters, there are functional desks for "product control" (i.e., report editing), collection management, and linguistic support. Also, there are target analysts maintaining surveillance of Soviet military and related activities. Similarly, in the Asiatic-Communist element there are analysts focusing on [redacted] of both the People's Republic of China and North Korea. There are also Elint analysts and reconnaissance support specialists.

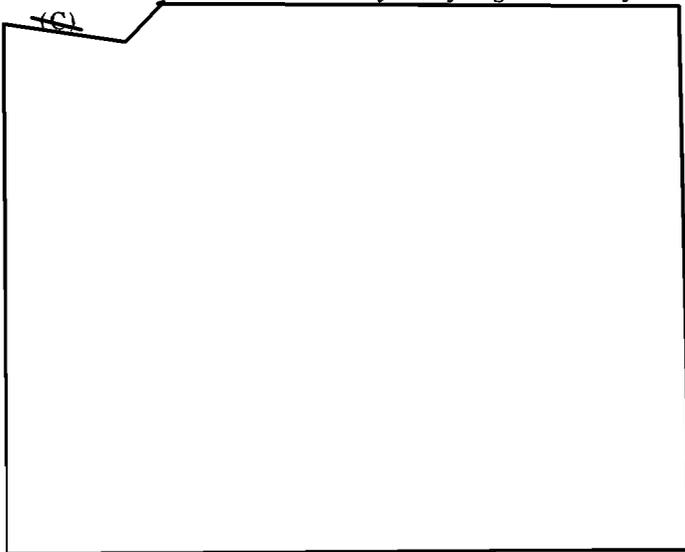
(U) Duty in NSOC is a rotational assignment: personnel serve an 18 to 36 month tour of duty and then return to their element, or are reassigned to another element. Thus, while some individuals may

elect to serve in the Center for a longer period of time, there are no permanent NSOC personnel. All qualified personnel in the Agency workforce are provided an opportunity to serve in NSOC. Periodically, a register of interested, qualified candidates is reviewed and updated to maintain a readily available reserve cadre.

(U) From its inception the Center has attracted exceptionally capable and dedicated personnel, many of whom gain immense job satisfaction being at the forefront in dynamic, challenging, and critical situations.

NSOC Support Systems (U)

~~(S)~~ To accomplish its mission, NSOC is served by an extensive network of communications connecting the Center with Sigint producers and users world-wide. Like other Agency elements, NSOC is serviced by, and has access to, the formal communications facilities for the transmission and receipt of record traffic. NSOC also has a dedicated, informal teletype communications network comprising some [] circuits. This informal communications network is the primary mode for routine time-sensitive Sigint reporting. In addition, it is also used for informal analyst-to-analyst conferences and the dissemination of informal guidance, messages advising Sigint activities of significant events, and other general operational messages. Through this network NSOC has direct teletype communications with virtually every Sigint activity.



~~(C)~~ Computer support for the Center is provided through several time-sensitive systems. The main time-sensitive computer system is a remote-access, processing system which executes communications and data-processing functions. The system in-

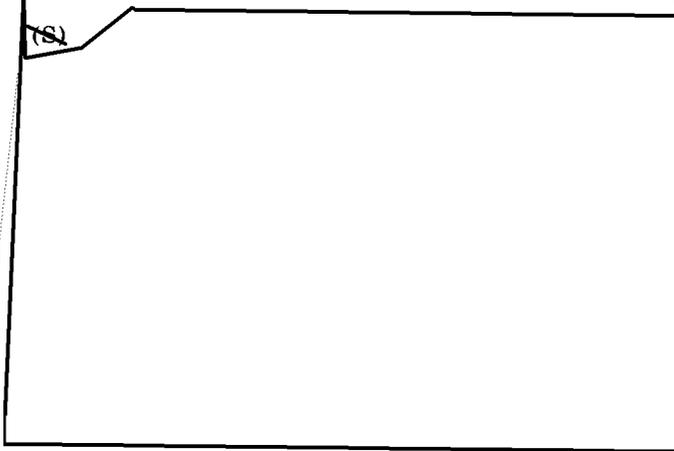
volves synchronized redundancy to ensure the reliability of a processing and communications capability. Approximately [] of the informal teletype communications circuits serving NSOC are interfaced with the main computer base. The system provides an automated on-line capability to accomplish a full range of cryptologic functions, including the production of Sigint information, which is disseminated automatically and rapidly to users, and the maintenance of a wide variety of data bases. Time-sensitive reports are automatically displayed on a desk-top alphanumeric terminal for immediate review and reaction by the NSOC analyst.

~~(S)~~ Through these interactive terminals, NSOC personnel may also query, update, and maintain data bases.¹² To assist analysts in the exploitation and monitoring of target activity, there are also on-line, computer-driven, graphic display systems. These systems enable the analyst to display data geographically against time and in a variety of ways. These systems receive their inputs automatically from the main computer system.

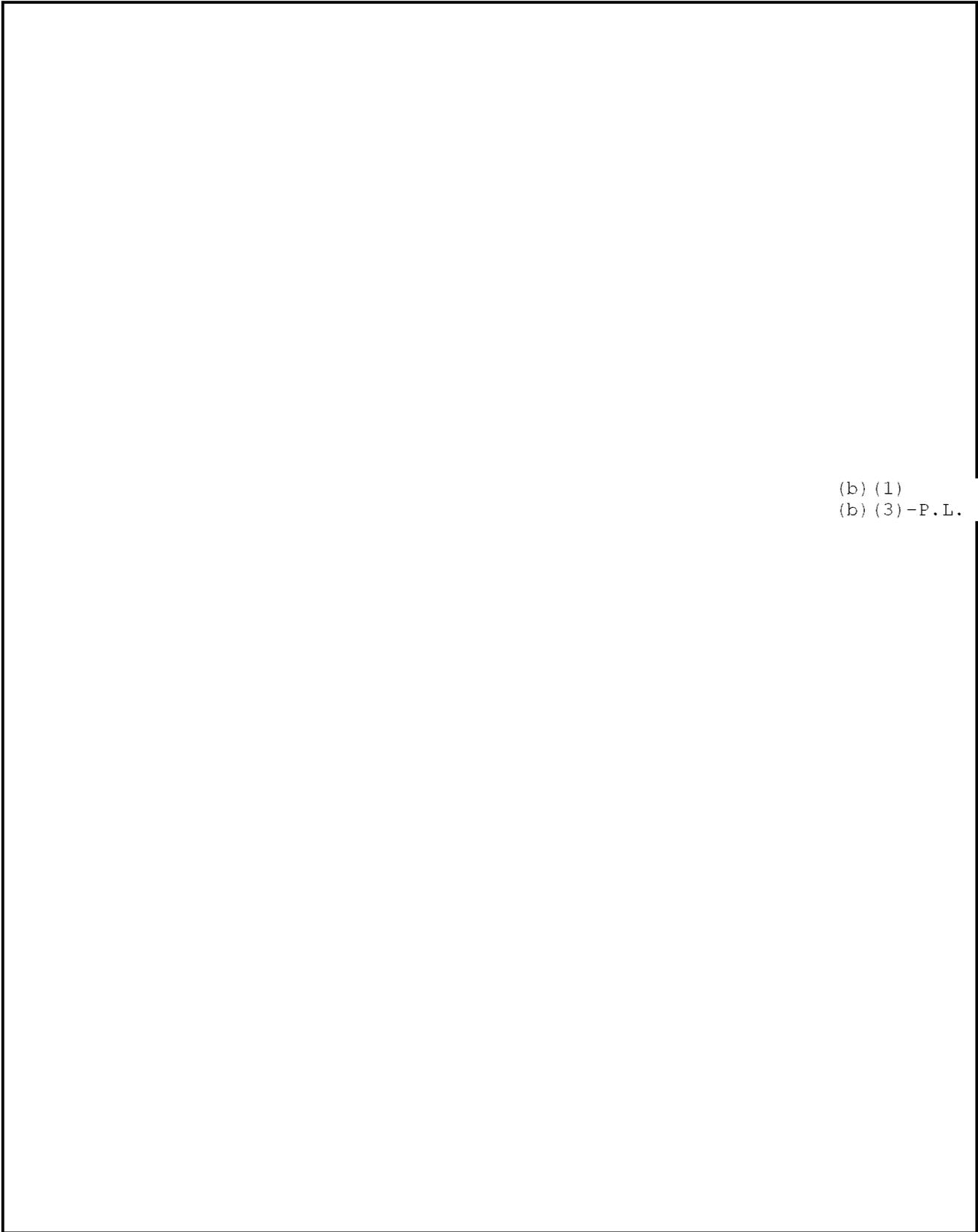
~~(C)~~ Another major computer support system is the Sigint On-Line Information System (SO-LIS), which is an interactive terminal system designed for the rapid retrieval of Sigint reports and requirements. The Sigint product data base includes electrical and hard-copy reports issued by NSA []

[] The on-line data base comprises the latest 14 months production. Reports may be retrieved on the basis of a variety of indices: subject, target country, type of activity, geography, date/time, originator, key word, title, serial, and others. The results of data base queries may be displayed in a scan mode on the interactive terminal and may also be printed in hard copy. These and other support systems facilitate execution of the NSOC mission and functions.

Relationships With Other Centers (U)



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~~(S)~~ Essentially, there are two dimensions to this relationship. NSOC interfaces with these centers individually, consistent with their respective interests and requirements. Thus, on a center-to-center basis, NSOC responds to specific queries regarding Sigint product and other requests for information from a particular center. Conversely, NSOC may request information and otherwise relate to a particular center for a specific, and generally limited, purpose. In addition, however, NSOC is interfaced with these centers via secure telephone communications, the National Operations and Intelligence Watch Officers Net (NOIWON).

~~(S-CCO)~~ Since its inception NSOC has been involved in virtually every crisis and contingency which has attracted the attention and resources of the national intelligence community. [redacted]

[redacted] In full coordination with Agency analytical elements, NSOC has performed well in crisis and contingency situations. The performance has mirrored the very significant role of the Sigint System in these and other circumstances. NSOC's role and responsibilities, however, are not limited to crisis situations. As the operations center for the National Security Agency, NSOC seeks to ensure peak performance by the USSS around the clock every day.

(U) [redacted] has served as Chief, Office of Operations and Reporting (V3), which manages the NSOC, since June 1978. Prior to being named Chief, he served as Deputy Chief and as an NSOC Senior Operations Officer. [redacted] holds a BA in History from American University and a MPA from Harvard University.

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¹³ ~~(S-CCO)~~ More recently, in addition to the primary centers, watch elements associated with the services (Army, Navy, and Air Force) became prime subscribers within the NOIWON. The service watch elements have a capability to listen but cannot speak during the conference.