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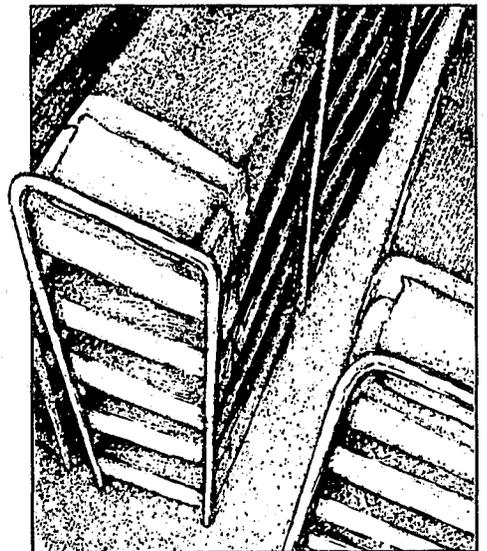
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# Quality Control for Prison Managers

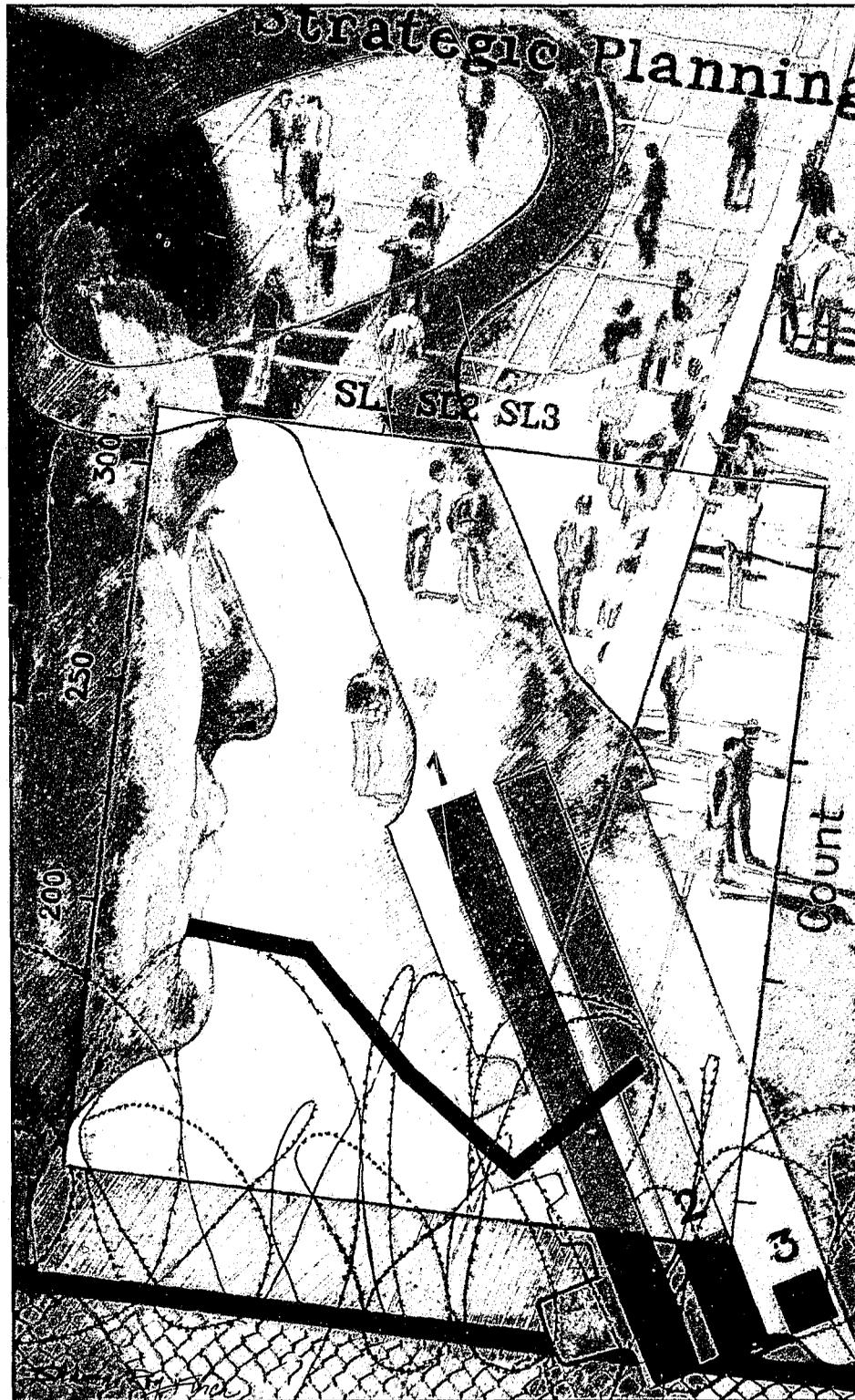
## The Key Indicators/Strategic Support System

*William G. Saylor*

In December 1988, the Federal Prison Camp (FPC) in Alderson, West Virginia, was given a new mission. Formerly an "administrative" facility—one that housed female inmates of all security levels—Alderson was redesignated as a level one—or lowest—security institution and required to house primarily those inmates classified as least dangerous and least likely to attempt an escape. The mission change required a concerted effort on the part of institution staff to ensure that the higher security inmates were transferred out of Alderson to appropriate facilities and to oversee the intake of many new low-security inmates.

Despite the myriad of problems that could have interfered with the mission change, the switch was accomplished smoothly and expeditiously; by April 1989, the vast majority of inmates at FPC Alderson were classified as security level one. Figure 1 (page 40), created using the Federal Bureau of Prisons' Key Indicators/Strategic Support System (KI/SSS), offers a clear graphic representation of Alderson's mission change. The first seven vertical bars on the graph depict the percentage of the inmate population (shown on the vertical, or "y," axis) at each security level in April 1988 (written 8804, for 4/88, at the bottom of the graph). The second seven bars show the distribution of inmates in April 1989, 4 months after the mission change was instituted.

This graph provides but one view of the population change at FPC Alderson, the redistribution of the population with regard to current security level. Key Indicators has the capability to describe this change in many additional ways. For example, one could display how the



Sharon Roy Finch

population has changed with regard to the number of individuals confined, inmate-to-staff ratio, the distribution of races, ethnicities, citizenships, commitment offenses, lengths of sentences, histories of violence, or a variety of other characteristics.

The Key Indicators system—a personal computer-based, menu-driven program developed by the Bureau of Prisons' Office of Research and Evaluation—offers managers and administrators an open window through which to view agency operations such as the mission change at Alderson. A comprehensive and unique data management system that gives users access to a wide variety of information, Key Indicators is an outstanding tool for strategic planning and the application of quality control principles within the Bureau.

The system contains extensive information on each BOP institution, region, security level, and the Bureau nationally, including information about rated capacity, admissions and discharges, average daily population, inmate demographics, security designation, custody classification, urine surveillance, assaults, escapes, disciplinary hearings, inmate grievances, education program enrollments and completions, staff demographics, staff perceptions of institutional social climate, and financial management. These data serve as "indicators" in the sense that they let the user observe and analyze system changes such as levels of crowding, the distribution of inmates with regard to security and custody requirements, inmate misconduct, participation in educational programs, and perceptions of staff well-being and safety.

Figure 2, another KI/SSS creation, offers a chance to examine implementation of

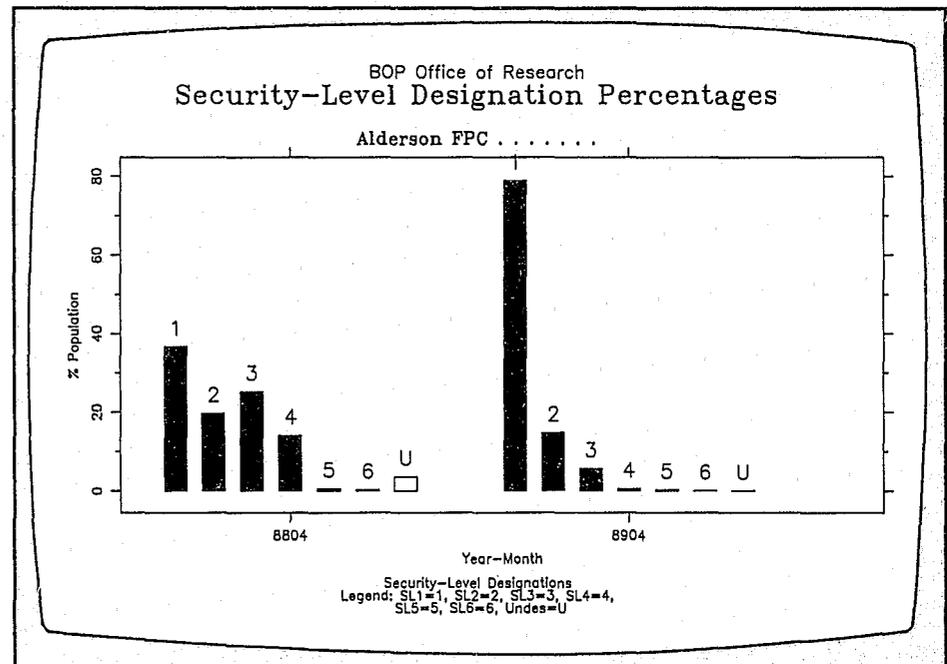


Figure 1

the BOP's Disciplinary Hearing Officer (DHO) program. Under this program, DHO's at each institution are assigned primarily to hear the more serious cases of inmate misconduct, leaving less serious infractions to resolution by a Unit Disciplinary Committee (UDC).

Figure 2 shows a difference in the DHO program implementation at lower versus higher security level institutions. The first graph presents information concerning security level one, two, and three institutions (written "SL1," "SL2," and "SL3" at the top of the graph), while the second graph presents data on security level four, five, and six institutions. The vertical axes of the graphs show the number of less serious prohibited acts heard by DHO's at the two groups of institutions.<sup>1</sup> The horizontal axis shows the

<sup>1</sup> For illustrative purposes, the numbers of prohibited acts are displayed. Strictly speaking, the number of events is not directly comparable in the two graphs, since they are based on populations of

span of time the graphs cover—in this case, from June 1988 through January 1989. The graphs illustrate the fact that DHO's at the higher security institutions hear a greater number of low-level disciplinary cases than at the lower security institutions. While there may be a number of reasons for the difference

different sizes. For the period displayed, the number of individuals in SL1 to SL3 facilities ranged from a low of 20,964 to a high of 22,380 and averaged 21,556 individuals, compared to a low of 12,038, a high of 13,165, and an average of 12,502 for the SL4 to SL6 facilities. There were, therefore, on average 70 percent more individuals available to perpetrate these acts in the SL1 to SL3 facilities. Consequently, the differences, if displayed as rates, would be far more demonstrative. So much so, in fact, that the differences in scale ranges in the two graphs would make them more difficult to compare, since the rates in the SL1 to SL3 graph would be dwarfed by those in the SL4 to SL6 graph. Nevertheless, the relative difference between the two graphs, which is of interest in this illustration, yields the same information for absolute counts and rates—there are far more low-severity misconduct hearings for SL4 to SL6 institutions than for SL1 to SL3 facilities.

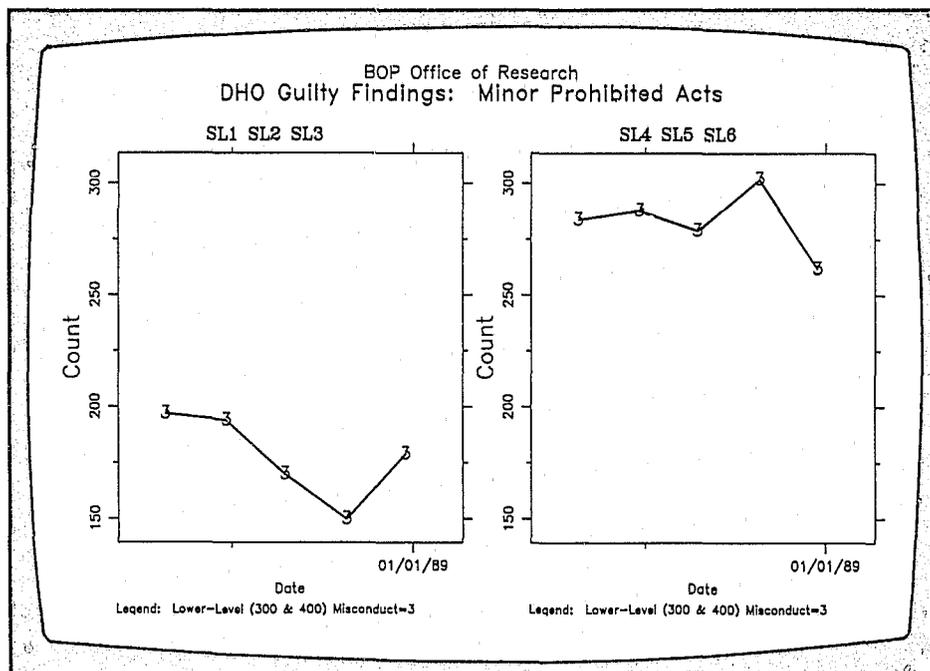


Figure 2

between the two groups, the graphs alert BOP administrators to look into the program application and perhaps reexamine the DHO policy.

These two examples show how the Key Indicators system can assist in framing appropriate quality control standards and monitor conformance to policy and progress toward accomplishing policy objectives.

### The control of quality

The control of quality is accomplished by establishing and monitoring measurable standards for comparison against measures of quality characteristics. Quality characteristics are any properties that define or describe the nature of a product. For instance, with regard to FPC Alderson's mission change described above, the desired "product" was conversion to a level one institution

whose primary quality characteristics could include a population composed predominantly of level one inmates, a certain population level, and a certain inmate-to-staff ratio.

As another example, if the Bureau wanted to establish a new industrial program in a number of institutions, the agency might set certain standards—requiring that the program be certified, that it be approved by the industry's union, that it provide opportunities for so many people, that it be the responsibility of certain individuals, that it achieve a specified level of production in a year, and so forth. The program's quality characteristics would be the actual number of people the program serves, the actual level of production, whether the program has received the required certification and approval, and so on.

Quality control activities supply a continuous screening mechanism for detecting known causes of variation in

quality characteristics. Knowing the answer to the question "when did a particular change occur?" often helps answer the question "why did it occur?" For example, a significant change in the inmate population might be attributable to a new Federal policy that was implemented some time before the population change. Alternatively, the population change could be due to an internal Bureau policy shift. In any case, Key Indicators will assist the BOP's management in linking external or internal events to changes observed in the Bureau's quality characteristics and provide the means by which to record these links for future reference.

### Putting quality control into practice

One of the most important tools for pursuing quality control is implementation of a system that provides comparative monitoring of system performance.

Quality assurance requires that the measures of quality characteristics be quickly accessible to managers. Appropriate displays of data ensure that changes that occur are brought to the attention of the responsible persons. Such access provides a continuous incentive for process improvements, which often lead to new understandings about the process. The Key Indicators/Strategic Support System is designed to provide managers with easy and timely access to these kinds of quality control measures.

Historically, Bureau managers' demands for information have been accommodated via one of two modes. The first mode is routine reports, such as year-end statistical reports on paper, which tend to be neither timely nor specific enough to meet the user's needs. Such information

is presented in a set format and may not be easily suited for quality control monitoring. The second mode of information delivery is via ad hoc reports, which generally contain relevant information but often lack timeliness.

Key Indicators was designed to provide an alternative mode of strategic information delivery. It eliminates lengthy information request queues that stem from centralized information distribution and expedites and lessens the cost of information retrieval by and for the Bureau's managers. It allows users to create reports and displays of data whenever they wish, based on their particular needs and interests. It requires no technical computer expertise or reliance on individuals with such expertise. Managers can thus become self-sufficient with regard to the acquisition of information required to plan, direct, monitor, and thereby attain quality control.

All the data in the system have been drawn from existing automated sources (such as JUNIPER and SENTRY). Beginning in January 1984, and every 28 days since, the Office of Research has archived extracts of the Bureau's mainframe data bases, where a wealth of data are initially loaded and stored for the purpose of meeting the agency's operational needs. This is the source of data for the KI/SSS. As the data are culled from the mainframe data bases, they are aggregated to provide indicators of organizational behavior and performance that relate to the Bureau nationally and to each of its institutions, regions, and security levels. Consequently, KI/SSS can provide monthly information about each of these levels of the Bureau.

Once the data are in this aggregated format on the mainframe, they are downloaded to a local area network of personal computers, then used to update the

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### Key Indicators will eventually provide a window through which to monitor the Bureau's performance.

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relational data base used by the Key Indicators system. Although the data are stored in such a way that the data base is very compact, and can therefore be accommodated by a microcomputer-based system, they are nonetheless stored in an extremely flexible manner, which affords the user tremendous latitude in formulating system queries.

Reliance on existing automated sources is efficient, since the data are a by-product of other operational requirements of the organization. It also permits greater confidence in the validity of the data.

Key Indicators presents mainframe computer management information system (MIS) data from a different perspective. The Bureau's MIS data provide information about individuals, for the point in time at which the query is made, for administrative purposes. Key Indicators, however, provides aggregate information (institutional, security level, regional, or national) for a specific point or a longer span of time, for descriptive and comparative analytic purposes. Key Indicators also facilitates comparison of different types of information, since it integrates data from different sources into a single source.

### Toward better penal quality control

Quality control in a penal institution is a far different task than on an assembly line, but some of the same principles apply. An ideal quality control system should help managers monitor and audit system performance and provide the information needed to formulate sound policies, determine the extent to which policies are adhered to in practice, and assess the effect policies are having on the system.

Ultimately, such a system should encourage more effective use of staff resources, since it affords quicker access to a wider variety of better quality information. It should also encourage proactive data management—providing an incentive to develop measures in advance of demands for them. This helps minimize the duplication of effort and poor quality of information that is likely when data are hastily compiled in a reactive mode.

The Key Indicators system is the Bureau's first attempt at such a "total" quality control system. While there will no doubt be a time lag from implementation until the system achieves its potential, Key Indicators will eventually provide a window through which to monitor the Bureau's performance. Such a window will give BOP managers a better understanding of how their policies work in practice, and will allow them to make decisions based on information selected for its relevance rather than by what can be accumulated within the short time—often perilously short in corrections—before action is required. ■

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