

EPS

Enlisted Planning System

Integrated Marine Corps Strength Planning

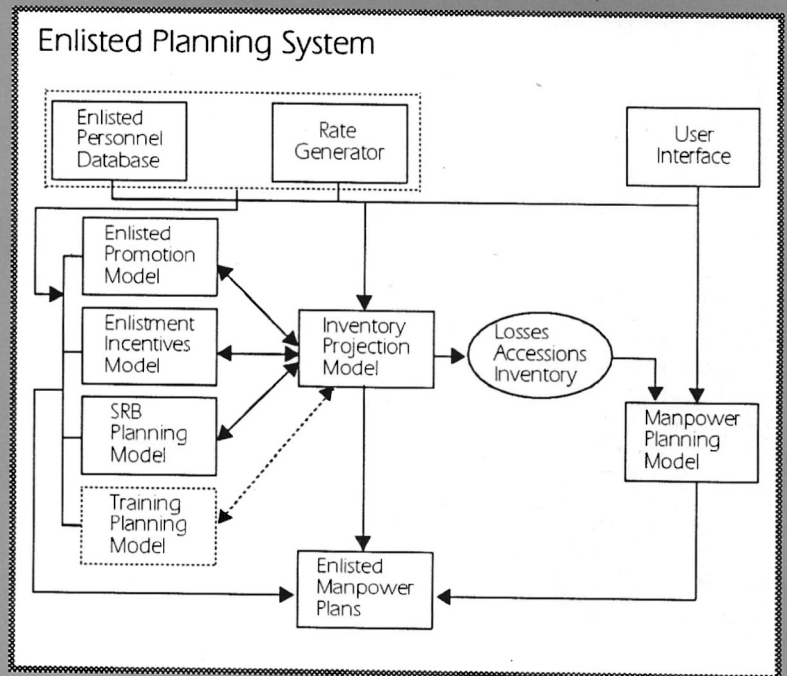
Improving Personnel Planning and Policy Analysis

The Headquarters, U.S. Marine Corps, like the other services, depends on analytic tools to help develop personnel plans and policies and monitor their execution. When the Marine Corps became frustrated with its tools' inaccuracies, their slow response, and difficulty learning and using them, they turned to NPRDC's Manpower Systems Department to design and develop a new system. The Enlisted Planning System (EPS) is now nearly complete. All major components are installed at the Enlisted Plans Section (MPP-20).

The Enlisted Planning System is an integrated set of computer-based mathematical and statistical models, a supporting database, and a user interface. The models support the construction and revision of official USMC enlisted manpower, reenlistment, promotion, and accession plans. They

"... the Marine Corp spent more than 80 man-hours preparing for the budget submission. I can produce a thoroughly documented plan in less than 8 man-hours with EPS"

Maj Jack Rickman
USMC Enlisted Manpower Planner



"Loss rates used within EPS enable all the plans-- strength, retention, and promotion--to apply a single set of rates."

Maj Jack Rickman
USMC Enlisted Manpower Planner

EPS

also allow planners to test and evaluate the impact of personnel policies prior to their implementation.

The central component of EPS is the Inventory Projection Model (IPM).

The IPM forecasts end-of-contract and attrition losses, accessions, reenlistments, and promotions by occupational code, paygrade, and length of service. These forecasts are then aggregated across all occupational fields to produce total USMC enlisted strength projections.

Forecasts produced by the IPM are passed directly to the Manpower Planning Model (MPM). The MPM phases the forecasted personnel flows across the months of the current and following fiscal year to: (1) meet authorized end strength and (2) avoid exceeding the USMC manpower budget appropriation. The MPM also allows planners to monitor the execution of the Manpower Plan during the fiscal year by comparing the planned flows with actual behavior.

The Selective Reenlistment Bonus (SRB) model optimally allocates a bonus budget to maximize the number of skills fully manned. The SRB planner can also set bonus multiples for skill and zone combinations, and the model will determine the cost of the plan and the expected number of reenlistments.

Finally, the promotion planning model helps planners allocate promotions at each paygrade among hundreds of skills areas.

The EPS user interface and model response time make "what if" exercises easy to set up and execute. Model parameter settings are explicit and easy to change. The integrated system software automatically passes data between models, reducing the "house-keeping" effort often found in complex decision support systems. Finally, EPS offers a variety of outputs that can be geared to specific problems or broad presentations.

Originally developed for the mainframe, EPS is migrating to a 486-class PC. EPS will be fully operational in FY94.

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