IV. FAA Management Must Become Performance Based

A. Recommendation

The Commission recommends that the FAA move to a Performance Based Organization (PBO), with a management board, and strong financial management in order to effectively provide the air traffic services and related capital investment required in the next century. Establishment of such a PBO would enable the FAA to reap the full benefits of personnel and procurement reforms already enacted by the Administration and the Congress. Through those previous actions the Administration and Congress demonstrated recognition of the FAA's unique management needs,

The Commission also recommends that the FAA's Management Advisory Council (MAC) be put in place as quickly as possible to provide guidance to the FAA on operating in a new, performance-based environment for both air traffic services and for airport, safety, and security concerns.

There have been numerous organizational shifts at the FAA over the past decade, all intending to improve FAA management. The structure of the FAA's air traffic services organization evolves almost continually, the FAA's Research and Acquisition organization has begun to implement Integrated Product Teams, and other changes associated with personnel and procurement reform have been instituted.

Despite these organizational shifts, there has been no fundamental change in the results attained by the FAA. The Commission notes that the existing structure is ill suited to making the fundamental shift required to attain substantially improved results focused on the needs of the FAA's customers. Existing rules and regulations, coupled with existing cultural norms, make it very difficult for the FAA to move from its old management by a control structure to a new management organization focused on providing continually improved services to users of the National Airspace System (NAS).

The Commission believes that establishment of a PBO within the FAA for the development, management, and provision of air traffic services would help bring about such a change in the FAA's management, ensuring that the FAA's performance will be continually measured and improved, that service costs will be reduced, and that efficiencies will be maximized. The provision of air traffic services is the function performed by the FAA that is most similar to a commercial enterprise. The Vice President's National Performance Review designed the PBO structure specifically to allow specific, more business-like, parts of government organizations greater institutional flexibility to meet the business performance requirements of their clients. Air traffic services are an almost perfect model of the types of services envisioned by the Vice President in proposing the PBO structure.

The Commission also recommends that the law establishing the MAC be amended. Currently, the law requires Presidential appointment with Senate confirmation of the appointees to the MAC. Since the N4AC's role is advisory, the Commission believes that the process of appointment and confirmation is disproportionate to their role. A more appropriate process for the MAC, particularly in the light of moving to a performance-based organization governed by a Presidentially appointed/Senate confirmed Board, would be to have the FAA Administrator appoint the MAC, much in the same way other advisory organizations to Federal agencies are appointed.

The following sections detail a number of approaches- focused on a PBO for the air traffic system and higher performance standards for the remaining more governmental safety and security organizations of the FAA. The Commission believes these changes will help improve the overall efficiency of the FAA and ensure that aviation users and the general public get more value for their money.

B. Performance Based Organization for the Air Traffic System

The Congress and the Administration have introduced various approaches in recent years to make federal agencies more results-oriented and federal managers more accountable for results. For example, the Government Performance and Results Act of 1993 (GPRA) requires agencies to set goals, measure results and report on their accomplishments. More recently, the Clinton Administration has proposed the formation of PBOs for certain agencies within the federal government.

A PBO is a distinct management unit within a government agency with strong incentives to manage for results. It would commit to specific measurable goals with targets for improved performance. In exchange, it is granted managerial flexibilities and accountability to achieve these targets. In order to become a PBO, an organization must have a clear mission with measurable services and a measurement system in place or in development. The organization should have a focus on external customers and its operation should be separate from policymaking. There must be a clear line of accountability to an agency head who would have policy responsibility. Finally, there must be funding levels that correspond to the organization's business operations.

Because the FAA's Air Traffic Services organization, including the research, development and acquisition of equipment used by the air traffic controllers, fits this description of the PBO extraordinarily well, and because the Commission believes that the operation of air traffic services in a more business like manner is crucial, the Commission recommends that the existing Air Traffic Services and Research and Acquisition Organizations be formed into a PBO.

Being more governmental in nature, the remaining parts of the FAA (safety, security, the airports office, and FAA administration functions) would remain as a traditional government agency, but one that also should become more performance oriented. The PBO for the Air Traffic System would still be part of the FAA and would still be subject to the safety, security, certification, and broad policymaking responsibilities of the FAA. It would contribute its share to support the

Administrator's staff offices and the Administration line of business. However, the PBO will have the flexibility to use the services of the FAA's administrative line of business or to contract out for these services as required by a Chief Operating Officer (COO). The degree of cooperation and coordination between the PBO and the rest of the FAA would need to be strong, given the critical role the safety organization plays in National Airspace Modernization through its certification of aviation-related technology.

The Commission also believes that the PBO can improve coordination between airport development programs of the agency and air traffic services. Too often in the past, airport infrastructure has been put in place without sufficient coordination between the air traffic services, research and acquisitions, and airports organizations in the FAA.

1. Performance Based Organization Board

The Commission believes that a management/oversight board for the PBO for the Air Traffic System should be established. If government and industry are going to provide the PBO with full authority over revenues, expenditures, and operations, a board is needed. Vesting complete authority in one individual would place too much power in that individual. To be successful, a board over the PBO for the Air Traffic System needs to bring different perspectives and expertise to the governance of the organization. The PBO Board will help provide stability and continuity of leadership. In addition, management direction and leadership of most business entities is provided by a Governance structure within which a board hires and evaluates a COO who is responsible for day-to-day operations. The PBO Board provides that type of structure.

As a board with full authority over the Performance Based Organization, its duties and responsibilities would include: hiring, firing, and setting compensation for the Chief Operating Officer of the PBO; setting and adjusting charges for services provided by the PBO, providing direction to the total affairs of the PBO to ensure its development and growth in services and financial results; overseeing total performance of the PBO; approving all financing programs and policies; and, reviewing and approving major capital investment programs. Specific responsibilities would include preparation of a business plan, an annual financial plan, an annual budget, annual financial and performance targets, details of performance-based pay systems, and other incentives for PBO employees. In fulfilling these duties the Board members would not represent any specific segment of the aviation industry, but would manage the PBO in the best public interest.

The PBO Board should be made up of seven members. Members would include the FAA Administrator and six public interest members with no direct pecuniary ties to the aviation industry but who are generally knowledgeable of best business and management practices. The legislation the Commission recommends would require three Board members (half of the Board) other than the Administrator, to be knowledgeable in the aviation field. This would ensure that aviation experience could be brought to bear on the issues considered by the Board. The Administrator of the FAA would chair the Board. The board members would have fiduciary responsibilities appropriate to the board's responsibilities. The public interest members of the Board would be appointed by the President and confirmed by the Senate for five-year staggered terms.

2. Creation of the Position of the Chief Operating Officer

A key function of the board is the appointment of the Chief Operating Officer (COO) for the PBO. The ultimate goal is to create an executive structure where broad policy issues are determined by policy officials and operational and financial issues are managed by the COO, who would be hired by the board based on her or his managerial experience and qualifications.

The Chief Operating Officer would sign with the board, an incentive based contract with appropriate compensation that defines the parameters for the business expected of the COO. If the COO does not perform appropriately, s/he could be dismissed; likewise, if the COO succeeds in an outstanding manner, s/he could be rewarded.

The contract would run for a fixed term (three to five years) and be based on the COO's performance. At the end of the contract, the existing contract could be extended. A career Government employee would have to surrender his or her career status to take the position as Chief Operating Officer.

The performance agreement establishes the basis for measuring the results and achievements against clearly defined, measurable, and meaningful performance indicators (discussed in more detail below). The agreement would also include specific financial management indicators. Other performance indicators might include productivity, efficiency, effectiveness, quality, timeliness, delivery of end user benefits within specified cost targets, cost-reduction, innovative service delivery techniques, and customer satisfaction. The agreement may stipulate important benchmarking initiatives designed to identify and promulgate "best practices" throughout the PBO for the Air Traffic System. The COO would also have the flexibility in coordination with the Board to provide or contract for administrative services for the PBO, including the budget and personnel management services. In general terms, the Chief Operating Officer would be responsible for reporting to the board on all matters concerning the operational and financial management of the air traffic system PBO.

The performance agreement establishing organizational targets for the year would cascade downward throughout the organization. The Chief Operating Officer would be responsible for hiring and firing of senior managers within the PBO, and would assign individual performance goals to the PBO, senior management and subordinate departments. Success of the organization and the tenure of its officers and employees could be defined and measured by the achievement of these goals.

3. First Steps in Establishing the PBO

The Commission recognizes that in moving to a Performance Based Organization in the FAA, it may be useful to first transition to the PBO by designating a subset of FAA operations for PBO designation. Oceanic air traffic control provides a segment of operations that is large enough to include all of the areas of FAA business, but appropriate for the first step in the complete PBO transition recommended by the Commission.

In the opinion of the Commission, the oceanic model could potentially allow the FAA to move more rapidly to institute a complete PBO for the air traffic system by allowing the agency to work each step of the process for the oceanic system while moving to implementing those steps for the larger system.

4. Establishing Specific Measures for FAA Operational and Financial Performance

The Commission believes that specific measures must be established for identifying the performance of the FAA in terms of the provision of air traffic services, financial management, and the maintenance of system safety and security.

These measures should encompass all aspects of the FAA, including the PBO and the operations of the airports, safety and security functions that would remain under the more Governmental structure of the remainder of the FAA. The MAC could play a critical role in establishing performance measures for the new PBO as well as for the remainder of the FAA.

a. Quantifying System Performance

The Commission believes that a fundamental truth about the FAA's Air Traffic Services organization, or about any organization, is that one cannot improve what one cannot measure. The FAA has begun a number of initiatives to quantify and measure the agency's performance, but these are in their infancy and need to be expanded. Therefore, the Commission recommends that the FAA adopt a more comprehensive set of system performance measures as a first and critical step to forming a Performance Based Organization for the entire air traffic control system. This building block will be a critical management tool for the new PBO board. Similarly, concrete measures of performance are needed to effectively manage the airport, safety, and security organizations within the FAA.

The Commission recognizes that the FAA currently measures aggregate delay within the system, and accounts for the causes of that delay. However, this measure does not fully address the economic interests of the users of the National Airspace System (NAS), and masks many of the inefficiencies of the system. For example, measuring aggregate delay does not take into account delays "accepted" by the system as a result of schedule padding to ensure that favorable "delay by airline" statistics are reported to the DOT. The Commission recommends that the FAA quickly complete its current investigations of the type of measures of performance noted below, and implement reporting of such measures as soon as possible.

User impacts can be defined in terms of four classes of performance indicators: Flexibility, Predictability, Access, and Delay, performance in any of these categories carries a cost to users. Some examples of measures the FAA is reviewing that could measure system flexibility include-reducing the number of procedural restrictions in the system, reducing the deviation between the route requested and the route flown, increasing the peak acceptance rate of airports and airspace; and, increasing the number of decisions involving pilot-controller collaboration.

The FAA could measure system predictability by measuring: reductions in the variation in system performance associated with changes in weather, reductions in the impact of system outages; and, increases in the number of delay allocation decisions made with direct user input. With regard to system access, or the ability of users to enter the system and obtain services on demand, examples of measures the FAA could use might include: increases in the number of airports with precision approach capability; increases in civilian utilization of Special Use Airspace; increases in the availability and quality of VFR in-flight services- and, increases in the coverage of air traffic control surveillance and communication.

Measures by which the FAA could measure improvements in system delay include: reductions in ground movement times at key airports during peak operations; reductions in the difference between estimated and average en route time; and, reductions in the number, duration, and impact of ground delays imposed by the Air Traffic Command Center.

5. Structural Recommendations to Achieve Effective FAA Financial Reform

This Section contains specific recommendations from the Commission on how the FAA can generally improve its performance. Many of these recommendations are not new. some of them are contained in the recommendations of previous commissions established to examine the operating practices of the FAA. The recommendations in this Section are fairly specific, and are intended to provide operating guidance to the Congress and the FAA as to measures that would improve the service provided to the aviation industry and the flying public by the FAA.

a. Enhance Financial Flexibility and Focus on Core Mission

The FAA at present is responsible for many activities that in the private sector would not be considered part of its core business activity. For example, today much of the FAA's ATC communications infrastructure is owned and operated by the agency.

In order to have an ATC system that is responsive to the growing and changing demands of airspace users, the Commission recommends that more services that FAA currently provides itself could be leased from private vendors saving development and maintenance costs. From our discussions with private industry, it appears that industry could "tailor' their documentation and testing processes more efficiently than the FAA bureaucracy. The FAA has already initiated steps in this direction. For example, the new technology that further automates the flight service stations will be procured by the FAA through a lease. This approach should be further examined and expanded in order to reduce up-front capital costs and recurring maintenance costs. In addition. many such leased services can more easily incorporate new technology, enhancing overall system efficiency.

As a specific example, the Commission recommends that the FAA explore the establishment of a "consortium" to modernize and maintain the Communications, Navigation, and Surveillance (CNS) infrastructure. This consortium would operate as a business and lease services back to the FAA. A starting point for this concept could be augmentation of the satellite navigation system at the local level in order to make it reliable and accurate enough for precision approaches to airports. Such a consortium could also help integrate FAA in-vestment decisions with industry equipage decisions. This integration is critical to the success of "Free Flight" and other modernization decisions.

b. Define and Develop Innovative Financial Options

Innovative management, financial, and operational reforms of the FAA are also critically needed. Numerous commentators have suggested changes to the FAA's management approach and evolution of FAA's culture. A lack of accountability is often cited as one of the foremost problems of FAA management. Organizational changes and changes in management practices, including use of innovative financial practices, could go much further to increase accountability and foster improvement in management and FAA culture.

In fact, the current budget process for the Agency reduces accountability because there is so much dispersed power and authority in making budget decisions that FAA managers, industry, and the Congress can always point fingers when something goes awry. Financial reform will help establish clear lines of accountability.

The need for financial innovation is illustrated by the FAA's need to coordinate modernization of the ATC system with industry's modernization of aircraft navigation systems. Such coordination would maximize the benefits of these investments to both industry and the FAA. In many cases, industry is waiting for the FAA to field systems before modernizing their aircraft fleets. The FAA needs to have a steady and flexible funding sources (sic) for capital investments to make commitments to the aviation industry. The Commission believes that funding for the FAA's modernization must be predictable and flexible; it should not be limited by arbitrary budget scoring rules. In the private sector, this predictability and flexibility is obtained by capital budgeting, which allows for sale of bonds and other debt instruments to rationalize capital flow. The rest of this Section suggests methods by which the FAA could rationalize its capital flow.

The Commission recommends adoption of financial reform initiatives, such as those discussed below, as absolutely critical to the success of all other reforms recommended in this report.

Borrowing Authority. FAA should be given authority for long-term borrowing from the U.S. Treasury or from private capital markets. To finance air traffic control investments of the PBO for the Air Traffic System it may be necessary to increase the total investment level from the currently constrained levels of about $2 billion per year to as much as $3 billion per year, exclusive of the air traffic services modernization requirements in the White House Commission on Aviation Safety and Security Report. Borrowing is not an option but a necessity for capital intensive enterprises, especially in technology transitions. Furthermore, the Safety Task Force of this Commission may recommend additional funding needs requiring borrowing authority.

Borrowing authority permits a federal agency to incur obligations and to make outlays against those obligations. Borrowing authority is usually authorized for businesslike activities where the activity being financed is expected to produce income or has a dedicated revenue stream over time with which to repay the borrowed principal with interest. This is a perfect fit for a cost-based funding structure and the FAA's need for a large capital program for system replacement and modernization.

Borrowing allows leveraging of resources by enabling key long-term investments to be made while repayments are made over time. Such investments could help reduce costs to the FAA or benefit system users. Borrowing for such investments would allow the cost to be repaid as the benefits of the investment are received. The ability to borrow would give the FAA greater flexibility to take advantage of capital investment opportunities as technology changes. A cap on borrowing could be established based on the size of the FAA capital program and the ability of user charges to support debt. The Secretary of the Treasury could be consulted on borrowing from the private sector ensuring that doing so would represent a sound business decision.

Borrowing for needed ATC investments should be viewed in the broader context of the PBO for the Air Traffic System managed by a professional board. Users and the PBO will have the same objective of providing a level of service quality at the lowest reasonable cost. Users would have greater input into capital decisions, capital budgets, and annual business plans. Borrowing for needed capital investment is a tool that can be used to expedite the introduction of new equipment. Users accept borrowing for their own investment programs and will send the proper market signals to ensure that needed investments are made by the Air Traffic Services organization with the lowest overall financing cost.

Borrowing for air traffic control modernization would result in outlays that would have to be scored under the rules of the Budget Enforcement Act. The current rules on Government scoring may stand in the way of the flexibility needed for the FAA to realize the full potential of borrowing authority. Current scoring rules could require the FAA to match any outlay from the use of borrowed funds with the same level of receipts. While this would give the FAA some needed flexibility in capital acquisition compared to the present system it would fall short of the "best business practices" and would have relatively limited value.

The Commission recommends that in addition to the authority to borrow, the FAA also be given special scoring treatment to allow only the annual current FAA outlays to repay debt service to be scored. This authority would only be effective when the FAA has established dedicated user charges for air traffic control services. This exception will promote efficiency in that it allows the FAA to borrow efficiently, behave in a more traditional businesslike mode and still provide protection for debt repayment to the Treasury or private capital markets.

Capital Leasing. Similarly, the Commission recommends that instead of outright purchase of capital equipment, a variety of leasing options exist that should be considered by the FAA in its capital decisions. Simply stated, a lease can allow full use of specified capital equipment, facilities, or systems for a stated period at a stated price per month. The lease, given appropriate budget scoring treatment, (For purposes of the federal budget, it would be necessary for the lease to be counted in terms of the annual expenditures for the lease ,rather than for the total value of the lease to be counted in the first year of the lease) avoids the up-front capital costs of purchasing the equipment and potential obsolescence. -The risk of owning the equipment are not taken on directly by the government, rather by the equipment owner. Leases can be customized to guarantee specific performance levels of equipment or systems allowing/encouraging periodic technology update by the owner of the capital good to meet or exceed performance levels at lower costs. The FAA has made minimal use of leasing in the past, but seems more receptive to considering this option at present.

Leveraging New ATC System Development Abroad. For some of its future modernization, the FAA could reduce costs by engaging, to a greater extent in joint development efforts with foreign countries. Additionally, the FAA could take advantage of ATC systems and standards developed by other countries. To some degree, the FAA is attempting to take advantage of foreign development efforts by promoting commercial off-the-shelf (COTS) acquisitions. Other opportunities might include some cost sharing on future navigation technologies or recovery of FAA investment by selling FAA navigation technologies abroad

Some would argue that the FAA's mission is far more complex than any foreign country's ATC environment. While this may be true in the aggregate, there are busy terminal and en route airspace areas abroad that are comparable to the US and that are fielding new equipment. The FAA will need to change its requirements generation process to capitalize on foreign developments. The FAA culture would also need to become more accepting to outside solutions.

C. Institute Management Reforms in AU Components of the FAA

Much of the discussion above focuses on reforms associated with the PBO that the Commission recommends be established for the management of the FAA's air traffic system. The Commission also recommends that the airports, safety, security, and administrative components of the FAA undertake substantive management and financial reform.

Good Government Reforms. The Commission recommends a series of FAA reforms including the use of Line of Business budgeting enabling greater certainty and accountability among FAA's lines of business for airports, safety and security. In addition, the Commission recommends the adoption of multi-year appropriations. This will promote better overall business planning and will provide greater stability for the FAA Safety, Security and Public Use functions that would be governed by the Authorization/Appropriation process.

Cultural Change Incentives. The Commission believes that the PBO structure and management will provide adequate incentives to the air traffic services portion of the FAA. The Commission notes that the incentives confronting FAA government managers in the remainder of the Agency often do not promote efficiency. New incentives need to be implemented to influence management and agency behavior. For example, the FAA needs to be more businesslike by benchmarking against best practices in the private sector. This concept should be extended to compare like facilities or functions within the FAA (benchmark against the best in your company). The FAA should give the incentive for managers, organizations, or facilities to be high performance in terms of potential awards or gainsharing and then determine why other facilities cannot measure up to the best. Aggressive FAA reform involving greater focus on proper use of Incentives would work especially well if coupled with a new cost accounting system, cost-based charges, Performance Based Organizations, and other financial reforms, because the cost data would enable rapid, timely cost tracking and post-implementation evaluation of different strategies at different facilities.

D. Summary

Overall, the Commission believes that a PBO structure would greatly facilitate the FAA's movement to a customer-oriented agency. Despite existing performance improvement initiatives, to date little service performance has been measured and few results are being reported, and improvements in service performance are not being achieved. From an aviation system user's perspective, several productivity benefits could result if the FAA transitions to a performance-based philosophy that would complement the cost-based financing system that is being recommended.

By adopting this structure for managing the air traffic control system, the Commission believes that the system will be run in a more productive and cost effective manner. Given the fact that labor costs at the FAA are rising 6 percent annually, a PBO governance structure should lead to appropriate and effective capital investments leading to an increase in productivity, thereby reducing labor costs and freeing additional capital for needed investments. This will ultimately reduce the day-to-day costs of operating aircraft. When coupled with the concept of free flight, in which aircraft will be able to take relatively unhindered, direct routines, a PBO will likely result insignificantly lower ATC operating expenses for users of the system. Adoption of such an operating philosophy also might facilitate user insight into what drives FAA service performance and increase the FAA's willingness to respond to users' service improvement suggestions. Absent such a move to a PBO, the Commission sees no alternative but to revisit the concept of establishing a government corporation to run the air traffic system.

The Commission strongly believes that the management reforms outlined in this Section of the report are essential for the FAA to move effectively into the next century and avoid the impending gridlock of the nation's air traffic system. The Commission also notes that these management reforms can not be fully achieved unless the agency receives the special budget treatment recommended in this report and moves to be financed under a cost-based system. Further, the Commission believes that the establishment of a performance-based culture in all parts of the FAA will make it possible to better establish the future capital and operational requirements of the agency.