Findings, Conclusions, and Recommendations

Trevor L. Neve
Jordan W. Cassell
Robert L. Crosslin
Robert A. Hutchinson

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In 1987, Congress reduced appropriated funds support for the Services' Morale, Welfare, and Recreation (MWR) programs, causing price increases, reductions in services, and fewer capital improvements. This report studies the feasibility and desirability of public/private ventures (P/PVs) as an alternative to five Government-operated MWR activities: golf courses, bowling centers, clubs, marinas, and theaters. In a P/PV, a private company under contract to an installation would fund and construct capital improvements to one or more MWR activities, and own, operate, and maintain those activities at its own risk of profit or loss, possibly sharing profits with the installation. The study looks at nine test sites and where appropriate offers example requests for proposals. The advantages of P/PVs are access to private capital, freedom from many of the Government's contracting, employment, and operating restrictions, industry expertise, and profit-making practices, and the potential of opening MWR activities to the general public. P/PVs can play a major role in MWR although they are not feasible for every MWR activity or all installations. Marinas present the most lucrative P/PV opportunities. Navy theaters are not recommended for P/PVs. Golf, bowling, and club P/PVs are feasible within certain parameters.
PREFACE

Volume 1 of this report describes the findings, conclusions, and recommendations of our study of public/private ventures in the financing, construction, and operation of Navy morale, welfare, and recreation (MWR) facilities. Because of the extent of the study and its duration, we have published a number of other documents ranging from position papers to requests for proposals on one or another MWR activity. Those various documents are included in the appendices to this report, which are bound separately in Volumes 2 through 8.

Volume 2 presents Appendices A through E; Volume 3, Appendix F; Volume 4, Appendices G, H, and I; Volume 5, Appendices J, K, and L; Volume 6, Appendices M and N; Volume 7, Appendices O, P, and Q; and Volume 8, Appendices R and S.
Executive Summary

PUBLIC-PRIVATE VENTURES FOR MORALE, WELFARE, AND RECREATION ACTIVITIES

A Solution to the Loss of Appropriated Funds

The Navy’s morale, welfare, and recreation (MWR) activities provide military personnel, retirees, and their dependents a wide range of sports, entertainment, and hobby programs and services. Such activities improve the quality of life at military installations and are credited with improving job satisfaction and retention rates.

The MWR programs include a range of activities, from those in direct support of mission readiness (e.g., physical fitness) that are incapable of generating enough revenue from user fees to be self-supporting through business activities (e.g., bowling centers) that can generate enough revenue to support operations and capital improvements.

Historically, 75 percent of the funds used to support the Navy’s MWR program came from user fees and the remainder from appropriated funds. However, that ratio changed in 1987 when Congress reduced appropriated funding support to the MWR program and eliminated appropriated funding subsidies entirely for revenue-generating recreational activities. As a result, MWR managers are now exploring ways to overcome the loss of funding support. Their immediate responses had been to selectively raise user fees, limit services, and postpone scheduled capital improvements. Those responses, however, may not be successful long-term remedies.

Public/private ventures offer the potential for a long-term solution. In such ventures, a private company under contract to an installation would fund and construct capital improvements to one or more MWR activities. The company would also own, operate, and maintain those activities and provide services directly to authorized users for a fee, at its own risk of profit or loss, possibly sharing profits with the installation.
An MWR activity under a public/private venture can be successful for several reasons:

- A private company has access to private capital to expand or improve services that will attract more customers and increase revenues.
- A private company is free of many of the contracting, employment, and operating restrictions that often make Government-run MWR activities less efficient and profitable.
- Industry expertise, experience, and business practices can result in efficiencies and reduce costs.
- Given a stable demand, the developer has built-in incentives to be profitable and stay in business over the long term.
- The recreation industry has experience in developing such ventures.

We found that public/private ventures can play a major role in maintaining revenue-generating MWR activities in the absence of appropriated fund subsidies. However, such ventures are not suitable for every MWR activity nor for all installations. We studied five segments of the private-sector recreation industry — bowling centers, golf courses, marinas, clubs, and motion picture theaters — and found each to have different requirements and expectations for success, levels of business sophistication, and experience in public/private ventures. We identified the economic and operational criteria needed for a successful public/private venture, and we assessed MWR programs at selected test sites on the basis of those criteria. Our major conclusions and recommendations are as follows:

- **Bowling centers**: Public/private ventures are economically feasible for existing Navy bowling centers with more than 24 lanes. Neither economic necessity nor operational desirability require that those bowling centers be opened to the general public. In fact, our economic analysis indicates that even with military customers only, lane fees can be capped at 75 percent of local market prices. Installation management now has enough guidance available to initiate a public/private venture for a bowling center without contracting for a separate study.

- **Golf courses**: Public/private venture golf courses will usually need a larger market than the installation can provide, and thus the golf course would have to be open to the general public at least part of the time. Installations contemplating the use of a public/private venture for a new golf course should first conduct a site study and market analysis so that they can better understand development costs and potential demand. The private sector will likely invest in major capital improvements if the installation is willing
to forgo military discounts on greens fees and cart rentals, expand the potential market, and enter into long-term contracts (e.g., 30 years).

- **Marinas:** Marinas present the most potentially lucrative public/private venture opportunities for the MWR fund. Such marinas can be economically and operationally successful without opening them to the general public. However, the installation management must consider the environmental impact very early since it may affect the feasibility, size, and location of the marina. Installations interested in building or expanding a marina must conduct environmental planning studies as well as feasibility and market studies. Furthermore, marina contracts require more controls because the marina industry is not yet mature, organized, or well developed.

- **Clubs:** The Navy is currently reviewing how officer and enlisted clubs are to serve today’s military. The outcome of that review will affect the role public/private ventures can play in Navy clubs. Currently, clubs offer only marginal opportunities as public/private ventures, but they can be successful under certain circumstances. The Navy should encourage regional public/private venture packaging in this MWR function as well as packaging with other MWR functions under the same contract. Public/private venture contracts for clubs can be relatively short-term ones and can be successful if the installation does not restrict prices.

- **Motion picture theaters:** Public/private ventures for Navy theaters are not economical and should not be pursued since Navy bases do not provide a population large enough to support a first-run complex.

The Navy should integrate public/private ventures into its overall financial and business management strategy. A major part of such a strategy would be the development of a long-term business plan that emphasizes public/private ventures as a means of saving limited nonappropriated funds and improving revenue-generating recreational assets.
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CHAPTER 1
INTRODUCTION AND BACKGROUND

In September 1987, Congress severely curtailed the Military Services' use of appropriated funds (APF) for morale, welfare, and recreation (MWR) activities, located in large metropolitan areas. It eliminated APF support for bowling centers larger than 12 lanes, golf courses, marinas, and motion picture theaters and it restricted military clubs to receiving no more than 20 percent of their total revenues from APF. Since that time, the Services have been seeking ways to overcome this loss of funds without closing down some of their MWR activities. In the meantime, however, some facilities (e.g., clubs) have been closed for economic reasons.

In this report, we explain the opportunities and challenges of using public/private ventures (P/PVs) to help compensate for the loss of APF. We studied five Navy MWR activities—bowling centers, golf courses, marinas, clubs, and theaters—at 10 test sites to see whether P/PVs are feasible for them. (A feasible P/PV is one that can meet the operational, security, and other criteria set by the installation while still offering a contractor the opportunity for profit.) For those test sites and activities for which a P/PV appears feasible, we have provided draft solicitation documents for contract award. The studies for each MWR activity and their draft solicitation documents are provided in full in succeeding volumes to this report.

Public/private ventures offer the opportunity for a long-term solution to the loss of APF. In such ventures, a company under contract to an installation's nonappropriated fund instrumentality (NAFI) would fund and construct capital improvements to one or more MWR activities. The contractor would also own, operate, and maintain those activities and provide services directly to users for a fee, at its own risk of profit or loss, possibly sharing profits with the installation.

MOTIVATION FOR PUBLIC/PRIVATE VENTURES

Both the private sector and the NAFI can benefit from P/PVs. The private sector is presented with the opportunity to access the Navy's market of authorized users, to access on-base sites capable of being developed, and to assume management.
and operation of existing MWR facilities. That incentive is a strong one since suitable land and stable markets for recreation activities are difficult to find. The incentive becomes stronger when available land for new ventures is in short supply and often prohibitively expensive, especially for golf courses and marinas. The concept of a stable, long-term demand generated by authorized users, and in some cases public access, broadens the market and increases profit potential. Moreover, a small proportion of P/PVs may in the future allow a degree of public access, with appropriate approvals, broadening the market base for the project.

The arrangement provides the NAFI with access to private capital for building or expanding an MWR activity at a time when nonappropriated fund (NAF) grants and loans are being rapidly depleted. P/PVs can expedite construction of new or expanded facilities since contractors do not face the approval and funding procedures required for the NAF construction program. A private contractor can bring to bear expertise, business experience, and a profit motivation. Moreover, the private sector is not hampered by many of the constraints placed on the NAFI. Those constraints include restrictive disciplinary and dismissal rules for NAF employees, restrictions imposed on subcontracting for goods and services for MWR activities, and a relatively expensive compensation program. Without such constraints, the contractor can be more financially and operationally efficient. Another benefit to NAFI is the prospect of sharing in the profits from the MWR activity through regular contractor payments to the NAFI. These NAF payments can then be used to support other MWR programs that cannot support themselves.

Finally, Congress is encouraging the NAFIs to test the P/PV concept. The House Appropriations Committee (HAC), in the 1987 DoD appropriations bill (HAC Report 99-793), requested a report on the feasibility of privatizing revenue-generating MWR activities located in the United States. In the 1988 Senate appropriations bill (S. 100-235), DoD was encouraged to "look for creative ways to generate nonappropriated funds if it is to maintain its current level of MWR activities." The bill also recommended that authority be delegated to installation commanders to open up MWR facilities to local communities to generate more revenue. Such recommendations, although not public law, represent the "sense of the Congress." The bill gives some indication of the congressional support the Services can expect when notifying the appropriate committees of their intent to contract for a P/PV. Indications are that the Services will be fully supported by Congress.
CURRENT MANAGEMENT OF NAVY MWR ACTIVITIES

The Navy's MWR program is big business. If it were ranked with private-sector companies in terms of annual dollar sales, it would be listed in the Fortune 500; in FY88, total revenues from Navy MWR activities were $675 million including $170 million in APF subsidies. The MWR activities provide needed services and experience for authorized users and generate substantial revenues and expenses in doing so. However, their revenues have not always covered expenses, and APF subsidies have been necessary.

Although the Naval Military Personnel Command (NMPC) is the program manager for MWR, the other major claimants1 and installations have considerable autonomy over how the activities are to be run, which programs are to be funded, and whether or not a P/PV should be attempted.

The NAF to finance the MWR program come from three sources: revenues from the activities, subsidies from Navy Exchange (NEX) profits, and interest from banking those revenues and subsidies. In general, the installation keeps the revenues from the activities and does not pass any of the funds to the major claimant or to NMPC. In addition, the installation keeps NEX profits from amusement machines and the package store (about 35 percent of total NEX profits). In FY88, those profits amounted to $31 million, and as such they constitute a major source of funds for MWR activities.

The NEX passes the remaining profits (65 percent) to NMPC which returns a portion to the major claimants. In FY88, NMPC retained $20 million of NEX profits (23 percent of the total) and returned about $37 million (42 percent) to the major claimants. The major claimants use the money to support MWR activities at their installations as they see fit. They may fund special programs, construction projects, or interbase competitions.

The NMPC also receives the interest for all installation, major claimant, and NMPC NAF placed in a central bank account. Since the balance in that account averages about $130 million, the interest is a sizable amount. NMPC uses the funds

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1Major claimants in the Navy are commands that have broad responsibility for implementing mission assignments. As such, they have responsibility for subordinate activities both ashore and afloat and make policy, provide guidance, and ensure appropriate levels of resources are available for mission effectiveness.
thus accumulated to pay for headquarters expenses for all NAF employee benefits and for construction programs. The construction program includes grants and loans for major NAF construction projects requested by installations. NMPC usually gives these MWR funds to the installations as grants, but in a recent initiative, it set aside $10 million for loans to which it intends to add between $2 million and $3 million annually. Although these “return on investment” (ROI) loans are interest free, the installations must justify them by demonstrating that the return on the investment for the projects will be enough to repay the loans. Since the loss of APF, the competition for grants and loans has been intense. Funds available for ROI loans have rapidly diminished and grants have been drastically reduced. Only some NAFIs have enough locally generated NAF for their capital improvements necessitating revenue increases at most installations. Also, projects over $500,000 require line-item approval by Congress.

Currently, under a test program cosponsored by NMPC and the Naval Facilities Engineering Command (NAVFAC), the initiation of a P/PV as a funding alternative for new and improved facilities and services has been strictly voluntary, and many installations are not yet ready to take the risk of dealing with the private sector under a concept with which they are unfamiliar. That reticence has been especially apparent when an installation is still counting on grants and loans. In the meantime, the installations are raising fees at many MWR activities and reducing service in an attempt to survive in a zero-APF environment.

The MWR funding situation varies from installation to installation. Funds from MWR revenues are not fungible—they are not interchangeable among installations. Some installations are in lucrative locations with large populations and have enough local funds to compensate for the loss of NMPC grants and ROI loans while others are fighting to survive. The quality of the sailor’s MWR therefore varies with the location.
CHAPTER 2
PUBLIC/PRIVATE VENTURE STRATEGIES

In this chapter, we address the findings, conclusions, and recommendations for each of the five specific MWR activities we have studied: bowling centers, golf courses, marinas, clubs, and motion picture theaters. The appendices to this report include the separate test site feasibility studies and position papers published during the course of this project. For those sites and those activities at which the Navy chose to proceed, we have drafted requests for proposals (RFPs) and have included them in the appropriate volumes.

APPROACH

We took a three-step approach to assessing each of the MWR functions. First, we visited one or more test sites chosen by the Navy. There, we determined the Navy requirements, and those of the installation, and the expectations of both for a contracted MWR function. We also determined the land, facilities, and equipment the installation would include in a P/PV contract and the potential market for the function. Second, we analyzed the appropriate industry (e.g., bowling) and interviewed industry representatives to determine the industry's operational and economic characteristics. (Appendix A contains a list of the organizations that contributed information or data for this report.) We were then able to determine the extent to which the market and facilities could meet the industry's needs. This step often involved an industry forum. Finally, we performed an economic analysis to see whether a P/PV would be economically feasible at the test sites based on knowledge of the industry, Navy and installation requirements, and existing physical and market conditions. To help in this analysis, we developed a pro forma income statement for the function. The assumptions used to build each of these pro forma statements are provided in Appendix B.

We presented the analytical results and recommendations to the test site activity, NMPC, and NAVFAC. Once the Navy made a final decision to pursue the concept, we developed solicitation documents to test the P/PV strategy. However,
before an RFP can be released in the marketplace, each project requires approval by OSD and Congress.

**BOWLING CENTERS**

**Navy Bowling**

Bowling is a popular recreational and competitive sport among active duty Navy personnel. Unlike some other MWR revenue-generating activities, the overwhelming majority of customers in Navy bowling centers are active duty personnel and their dependents, not retired personnel. Bowling leagues with teams made up of personnel from military units are especially popular. The Navy does not want to open its bowling centers to general public use.

Navy personnel participate in bowling at a slightly higher level than do civilians and it is becoming more popular. Recent Smart Compass\(^1\) survey results indicate that about one-third of active duty personnel and about one-fifth of their dependents bowl. About 10 percent of retirees bowl.

Most Navy bowling centers are small, having fewer than 24 lanes each. Only 6 Navy centers have 30 lanes or more, 12 have 24 to 28 lanes, and 83 have fewer than 24 lanes. The small sizes of Navy bowling centers have important implications for P/PV approaches. Appropriated fund support for Navy bowling centers was $10.6 million in FY88.

**Test Sites**

The test sites for bowling P/PVs were Naval Station (NAVSTA) Staten Island and Naval Training Center (NTC) Great Lakes. Those two sites represent totally different types of bowling requirements, and therefore, different P/PV approaches are needed to satisfy the requirements.

Naval Station Staten Island is a new surface action group homeport, taking over the Army's old Fort Wadsworth. It is located on the northeast tip of Staten Island near the Verrazano Bridge, which connects Staten Island and Brooklyn. The Navy is constructing new piers for the homeported ships and other major facilities to support the installation's personnel. Significant numbers of active duty personnel

\(^1\)Smart Compass is a program that surveys the usage of MWR activities by eligible patrons at each Navy installation on a 3-year cycle.
are due to begin arriving in late 1990. The approximate base loading of NAVSTA Staten Island is expected to be as follows:

- 4,500 active duty personnel, of whom 3,500 will be on deployment at any given time
- 5,000 military dependents
- 1,000 Navy Resale and Services Support Office (NAVRESSO) personnel
- 1,000 retirees and other authorized users.

The total base loading is therefore expected to be about 11,500 personnel. However, since about 3,500 personnel will be deployed at any given time, only 8,000 people will be available to form a stable authorized users market from which to draw bowling patrons.

The Navy originally planned to build an 18-lane bowling center for NAVSTA Staten Island, but the project was rejected by Congress in the Navy's FY87 NAF construction project submission. The Navy decided to investigate a P/PV to satisfy the bowling requirement.

Naval Station Staten Island currently has no bowling facilities. Therefore, no data are available on actual participation in bowling by NAVSTA Staten Island personnel. However, the recent Navy-wide MWR surveys cited above suggest that bowling would be a popular recreational activity at that installation.

Naval Training Center Great Lakes is 40 miles northwest of Chicago in Lake County, Illinois. It dates back to the early 1900s and is one of the Navy's three induction and training centers for new recruits and basic training graduates. No ships are stationed at the installation. NTC Great Lakes has 35,000 authorized users as follows:

- 23,300 active duty personnel
- 7,800 dependents
- 2,400 DoD, NAF, and contractor personnel
- 1,500 retirees (Lake County).

In addition, 8,000 recruits are confined to the recruit compound and are not part of the bowling market. Since no ships deploy from or to NTC Great Lakes, the
population is relatively stable. However, since most of the active duty personnel are in training, they stay for relatively short times.

NTC Great Lakes currently has a 32-lane bowling center that was completed in 1976. Bowling is the number one recreational activity among active duty personnel and their dependents at NTC Great Lakes according to a recent Smart Compass survey. The installation received approval for a $2.7 million NAF construction project for a major bowling center expansion that included 18 additional lanes, a multipurpose room, a larger snack bar and lounge, and other improvements. The project had reached the 35 percent design stage [design specifications were completed by a private architect and engineering (A&E) firm] and the installation was ready to issue an invitation for bids for construction when the Navy decided to consider a P/PV as an alternative.

Several factors led to the decision to put the NAF construction project in abeyance until a P/PV could be tested. The number of lines bowled—a line is one game of ten frames—had decreased from a high of 415,456 in 1983 to 290,000 in 1988, and the existing center is energy-inefficient in that it uses incandescent rather than fluorescent lighting, which creates burdensome utility bills that can no longer be paid with appropriated funds. Additionally, the heating, ventilation, and air conditioning system is powered by steam produced on base, which is also relatively cost-inefficient. The NTC bowling center had been profitable until the last 2 years. The decrease in lineage; elimination of APF subsidies; inefficient heating, ventilation, and air conditioning (HVAC) and lighting; and increases in the drinking age have pushed the center into the red. The installation expects that a private developer would invest in energy-saving equipment, automatic scorers, aggressive marketing, and other strategies to turn around the decrease in lineage while cutting expenses.

The NAF construction projects that the Navy had planned for NAVSTA Staten Island and NTC Great Lakes were too large given the fact that APF can no longer be used for MWR activities. Neither facility is economically feasible in view of the size of the authorized user markets and the absence of APF subsidies. The DoD has established sizing guidelines for the construction of specific types of facilities, including those for MWR activities. Those guidelines established in NAVFAC P-80, Facility Planning Criteria for Navy and Marine Shore Installations,
have not been revised to take into account the need for MWR revenue generators to be self-supporting.

Industry Characteristics

We met with many representatives of the bowling industry, including several of the largest chain operators in the country — AMF Bowling Center, Inc.; Brunswick Corp.; and Fair Lanes, Inc. We also met with dozens of smaller operators. In addition to visits to their offices and bowling centers, we established a beneficial relationship for exchanging information with the Bowling Proprietor's Association of America (BPAA), which represents more than 7,000 bowling centers nationwide. We made presentations and held question-and-answer sessions on Navy bowling P/PV plans at two annual meetings of the BPAA Executive Committee (more than 300 of BPAA's members).

Bowling is a mature industry and has not been growing in recent years; however, the industry is actively attempting to improve its growth picture through aggressive advertising and by adding more ancillary activities such as video games and theme restaurants. The sanctioned league bowling participation rate among adults in the private sector varies from 2 to 9 percent (5 percent on average). In 1986, some 70 million Americans bowled — about one-fourth of the population (compared to 33 percent of active duty Navy personnel).

The structure of the industry has changed in ways that are important for Navy P/PV considerations. Like many American industries, bowling has been moving toward chain operations. The largest chain owns just over 100 centers, and several chains own about 40 centers each. Twenty centers would be considered a medium-size chain operation. A natural part of the movement toward chains is the movement toward regional management. The chains put several centers, about 4 to 10, under the supervision of a regional manager. Although moving toward larger and larger chain operations, the industry still comprises mainly owners with one or a few bowling centers.

The industry has also moved toward larger and larger individual bowling centers. Its standard now is to build only centers of at least 32 lanes each, and most new centers are even larger. Chains that are buying out independent operators with older facilities are primarily interested in centers that have at least 24 lanes. The
economies of scale and management make it difficult for smaller centers to compete in the market.

Bowling centers also require relatively long operating contracts since they need a relatively large up-front capital investment compared to the annual revenues generated. It costs between $50,000 and $70,000 per lane to construct a new bowling center. The costs of the building, the equipment, and the other facilities are amortized over a relatively long period of time. Bowling center proprietors are used to dealing with land/facility leases in the 40- to 50-year range and sometimes even up to 90 years. Therefore, Navy P/PVs for bowling centers that require major new construction will require concession agreements of at least 30 years and maybe longer.

League bowling is the heart of a private bowling center's operations, typically contributing 60 to 70 percent of revenues. Food and beverage sales and amusement machines constitute other major sources of bowling center revenues that private operators count on for profitability.

Based on industry interviews, the private sector is interested in potentially participating in bowling center P/PVs for a number of reasons: the maturity of the industry, a stagnant demand for bowling in the private sector, the popularity of bowling in the military, and the tendency toward chain operations. Many industry representatives are eager to compete for the two test sites, given the structure of the concession agreements that we have outlined to them.

In the past, the private sector has objected to opening military centers to the general public. This sensitivity arises from the fact that bowling has not been a growth industry lately, and excess capacity exists in many communities. Fortunately, that condition is consistent with the Navy's desire to keep its bowling centers closed to the general public.

**Economic Analysis**

We performed an economic analysis of the feasibility of P/PV bowling centers by constructing quantitative models of the expected financial operation of a privately owned and operated bowling center at each test site. Appendices C, D, E, and F detail the specific methodologies and results of our economic modeling and the resulting RFPs for NAVSTA Staten Island and NTC Great Lakes. We based our demand (e.g.,
number of lines) projections for NTC Great Lakes on historical demand statistics of
the military center and that for NAVSTA Staten Island on Navy-wide bowling
participation rates. We estimated the costs for in-house and P/PV centers separately.
Several private-sector proprietors confidentially shared actual financial statements
for similar sized centers with us and also commented on the appropriateness of our
pro forma models.

Included in the pro forma financial model were the capital costs of constructing
or expanding the bowling center facilities and the amortization of financing and
depreciation of capital assets paid for by the private contractor. We also assumed an
escrow account of 3 percent of P/PV gross revenues to be used for continuing capital
improvements over the life of the contract.

In general, the nature of the industry is such that the private sector is not
interested in small Navy bowling centers. The private sector cannot afford to hire
and train a professional center manager, at a competitive salary, for a small Navy
center. In addition, other financial and management economies of scale important to
the private sector can only be achieved at larger Navy bowling centers. Since the
Navy will offer rent-free land, and rent-free use of existing facilities, the private
sector may be willing to operate Navy bowling center P/PVs that are slightly smaller
than the preferred industry minimum size.

In addition to the center size, market size is also important. The private sector
often uses the rule of thumb that it must have 1,000 adults earning at least $15,000 a
year for each lane to be profitable. Since active duty Navy personnel and their
dependents have a bowling participation rate about 1.5 times the private sector, the
rule of thumb for P/PV Navy bowling centers is probably somewhat fewer than
1,000 adults per lane.

Another economic finding relates to the ability of the operator to offer ancillary
products and services. Although bowling pro shops typically only break even, they
are usually offered as a competitive convenience for customers. Other products are
important sources of income however. Food, beverages, and amusement machines
are considered an integral part of a private-sector bowling center operation. Our
analysis of private-sector operating statements revealed that typically 30 to
40 percent of total revenues emanates from food and beverage sales and amusement
machine usage. These ancillary products also have a higher gross profit margin than bowling games themselves.

Our economic analysis for NAVSTA Staten Island revealed that the projected population of authorized users would not support either a profitable in-house facility or a P/PV center. However, we found excess lane capacity in the community. Every bowling center manager within a 10-mile radius of the installation stated that he had room for both Navy evening leagues and open bowling. Therefore, we recommended to NMPC that the installation contract for excess capacity in the local market.

Our economic analysis for NTC Great Lakes indicates that a P/PV for a bowling center expansion would be attractive and economically successful under appropriate conditions. The appropriate conditions were: a 25-year contract term; lineage fees capped at 75 percent of median market of comparable facilities; food, beverage, and amusement operations and revenues accruing to the contractor; and a patron market limited to currently authorized users. We estimated that a P/PV contractor could add at least eight new lanes, make a reasonable (i.e., industry average) profit, and share some additional profits with the installation’s NAF. That estimated success is in contrast to the current and projected small operating losses of the current center. The small operating loss accruing to the local NAF is made even larger by the employee fringe benefits paid out of central NAF monies, the sum of the two representing the total Navy loss from in-house operation of the center. Just as important, the Navy would not have to spend $2.7 million of its own scarce NAF to pay for the desired capital improvements.

However, since we performed our analysis, bowling lineage at the center has dropped another 100,000 lines, or one-third from 2 years ago. This decrease now casts doubt on the advisability of expanding the center. It would be more prudent to let the contractor attempt to reverse the downward trend in lineage, adding a "trigger" amount of total lineage that would require the contractor to construct additional lanes. If the increased lineage does not materialize within, say, 5 years, then the facilities could revert to local NAFI operation, or another contractual agreement could be negotiated. The addition of certain items, such as automatic scorers and improvements to the food and beverage facilities, could still be required immediately and remain feasible to the concessioner.
How can a P/PV contractor expect to make a profit at NTC Great Lakes when the in-house operation is currently incurring a small loss? As we explain in Appendix E, the P/PV operator would have several advantages. The contractor would invest money in the business and would take all possible economic and management actions to make a return on the investment. Primarily, that return involves attracting customers by offering a quality product at a competitive price and doing so at an efficient cost. The private sector will offer incentives to managers to increase sales and revenues and decrease costs, as is done in all private-sector bowling operations. The private sector will also apply its skill and knowledge to keep costs at a minimum without sacrificing product quality. Flexibility in personnel policies, making energy-efficient improvements to the utility systems, and keeping various expense ratios close to known industry averages will also help to achieve a more cost-efficient center.

Conclusions

Public/private ventures can be successful for many Navy bowling centers and can provide a much needed outside source of capital investment dollars to supplement shrinking NAF budgets. However, the Navy must attract the private sector by offering potentially viable candidate sites. First and foremost, P/PVs will be successful only at installations whose authorized user population can support, according to private-sector standards, at least a 24-lane center. Existing smaller centers will have to be kept in house. Requirements for new centers with fewer than 24 lanes will either have to be funded by NAF or fulfilled by contracting for excess capacity in the local community. The DoD sizing criteria for bowling centers are inconsistent with MWR revenue-generating activities in an environment of no APF.

The private sector is willing and able to take on Navy bowling centers as P/PVs but it requires long contracts — at least in the 25- to 40-year range. The P/PVs can be successful even if they charge less than market prices for lineage, but the contractor needs flexibility in pricing other products and services. Food and beverage and amusement machines are important ancillary products in terms of being part of the bowling experience and as a major source of revenue for a P/PV center. P/PV bowling centers will not be profitable if private contractors are not allowed to have both the operation and revenues of these ancillary products.
Regional packages of Navy bowling centers under one P/PV contract would allow the private sector to maximize financial and management economies of scale and return higher profit-sharing dollars to the respective local NAF funds.

It would be difficult to open Navy bowling centers to the general public. Neither the Navy nor the industry wants them open to the public even if the P/PVs are fully open to competitive bid.

**Recommendations**

Based on our findings and conclusions, we recommend that the Navy take the following actions:

- Actively pursue P/PVs for new or existing Navy bowling centers with at least 24 lanes
- Contract for excess capacity in the private sector if available, or use internal NAF construction monies for new requirements of less than 24 lanes
- Keep existing centers of less than 24 lanes in house
- Use relatively long — at least 25-year — P/PV contracts
- Cap lineage fees at about 75 percent of the average (median) market of comparable facilities
- Do not control prices of other products and services at the center
- Include food and beverage and amusement machine operations and revenues as part of P/PV contracts
- Ask DoD to revise its sizing criteria for bowling centers in light of zero-APF funding
- Package several centers regionally under one P/PV contract
- Keep Navy bowling centers closed to the general public (except for current rules allowing occasional guests and tournaments).

**GOLF COURSES**

**Navy Golf**

The Navy has 54 golf courses on 51 installations around the world; 22 have 9 holes, 30 have 18, and 2 have 36 holes. In general, the courses are much the same as their civilian counterparts. They rent golf carts, provide a pro shop, operate a
snack bar or restaurant, and offer golf lessons. Although the golf courses are often perceived as serving only officers and retirees, surveys have shown that they are well patronized by the younger enlisted personnel. In FY85, APF support for Navy golf courses amounted to $20.8 million compared with $10.6 million for bowling centers and $1 million for marinas.

The loss of appropriated fund support in September 1987 has had a major effect on Navy golf courses. The artificially low golf course fees have been steadily raised to generate more revenue. In FY88 alone, greens fees were raised an average of 23 percent and golf cart rental fees by an average of 14 percent. Installations are also looking to the private sector to see whether the golf industry is willing and able to operate their courses more economically.

Test Sites

We looked at two test sites for Navy golf course P/PVs. The first one is an existing golf course at Naval Air Station (NAS) Cecil Field in Florida. The second is for a new golf course at NAS Lemoore in California. The existing course at NAS Cecil Field is an 18-hole, par 72 course with a dedicated water well that would serve as a major incentive to the private sector. The base loading for NAS Cecil Field is as follows:

- 3,700 active duty personnel in training
- 6,300 active duty flight personnel of whom 50 percent are in port at any given time
- 8,200 military dependents
- 840 reservists
- 819 DoD civilians
- 32,700 retirees and their dependents.

Naval Air Station Cecil Field has room for an expanded driving range and miniature golf course, which could also be used as incentives to the private sector. In the past, the course suffered from inadequate care, which left it with various insect, pest, and weed infestations. In October 1987, the United States Golf Association estimated that the course needed care for 2 to 3 years to bring it to first-class condition. We concluded that operation of the NAS Cecil Field course should remain in-house if no major capital improvements were contemplated and if fees could be
raised to 80 percent of average local market fees (see Appendix G). The installation was not satisfied with the status quo, however. The course could be improved by expanding and upgrading the greens and by making the fairways more imaginative. We advised that if course operations included major capital improvements, a P/PV would be more beneficial than in-house operations. To this end, we drafted the RFP presented in Appendix H.

Naval Air Station Lemoore is somewhat isolated, and its installation management wants to include an 18-hole golf course in its MWR program. The base loading for NAS Lemoore is as follows:

- 5,700 active duty personnel
- 9,100 military dependents
- 100 reservists
- 1,300 DoD civilians
- 4,000 retirees and their dependents.

The installation management has selected a 250-acre site on the installation perimeter to develop the course. The land is not fenced and is currently under an agricultural out lease. The installation management agreed that when the course is completed, it will be open to the general public and that the operator will not have to provide military discounts on greens fees and cart rentals. After analysis of this case (see Appendix I), we recommended that the Navy proceed with a P/PV since it is feasible and is the most efficient and economical way for the NAFI to have a completely new course constructed. In fact, in the current austere NAF environment, it is probably the only way to achieve it. The draft RFP for a NAS Lemoore golf course is contained in Appendix J.

**Industry Characteristics**

A P/PV golf course on a military installation would be competing with three types of civilian courses: privately owned daily fee, municipal, and privately owned membership club. About 45 percent of the nation's golf courses are privately owned daily fee courses. They are open to the public and the quality of play varies widely. A little more than 15 percent of U.S. courses are municipally owned. Greens fees may be artificially low because municipal subsidies help pay for the course's operations and maintenance. Playing conditions are often poor, however, because these courses
are often underfunded. This underfunding has led many municipalities into P/PV agreements for their golf courses to improve the playing conditions and reduce the financial burden. The 39 percent of U.S. courses that are private clubs offer the best playing conditions, but their membership is restricted and usually expensive. Private clubs offer the least competition to P/PV courses on military installations.

The private sector has about a dozen golf course management companies, and some of those are also interested in golf course construction. The major golf course developers with whom we met include the American Golf Corporation, PGA Tour, and the U.S. Golf Company. We also spoke to several golf course management companies including Golf Management, Inc.; Jack Nicklaus Golf Services; and Kemper Sports Management, Inc. The industry is fairly mature, highly competitive, and interested in the concept of P/PVs at military installations. The National Golf Foundation projects a nationwide shortage of 720 courses by 1990. However, the industry is not exceptionally profitable. The capital investment required for a new course is huge. Thus, the industry is looking for existing courses to operate and for public land on which it can build. Those factors help to explain the industry's interest in P/PVs. In fact, P/PVs for municipal golf courses are quite common and examples exist throughout the country.

The industry prefers to package several P/PV golf courses together under one contract as in the case of the five P/PV courses in Philadelphia. The contractor can then realize the economies of scale and share some of the management functions and grounds-keeping expertise. Withal, the industry is still willing to consider a P/PV at a single military installation. This desire to package does not extend to packages with other MWR functions, such as the bowling center and marina, with the possible exception of food and beverage. The trend is toward expanding golf course restaurants into catering and banqueting facilities wherever they would be profitable. Moreover, the restaurant industry is willing to package military clubs with a golf course and subcontract the management of the course.

Economic Analysis

Some common findings apply whether the P/PV is for an existing 18-hole golf course or for a new one. First, the revenues are extremely sensitive to the number of rounds played. The populations of even the largest Navy installations are not enough to support major capital investments, especially the investment needed for a new
course, unless that population is supplemented by a large retiree community or by populations from other nearby military installations. Even the average existing 18-hole golf course requires that about 50,000 rounds per year be played before it is profitable. Second, the revenues are also sensitive to the greens fees charged, and that sensitivity also applies to price discounts. Third, food and beverage operations can be important contributors to the course's profitability especially if the location is conducive to catering and banqueting services. The factors that determine the success of a golf course are numerous and complex. They include not only market population but also the age and education of the population and the location of the course. Competing courses in the area must not only be accounted for but also analyzed to determine what market segment they are vying for and what quality of services they offer. About 165 acres are needed for an entire 18-hole golf course but the location of that acreage is crucial. It is important not only for market access but also for availability and cost of water, soil condition, and weather.

Conclusions

P/PVs offer opportunities for installations to acquire new golf courses or expand and upgrade existing ones, but some tradeoffs will have to be made. The sensitivity of revenues to rounds played means that capital improvements of more than $300,000 or $400,000 have to be funded by opening the course to the general public unless the course is already played to capacity. If the improvements are small (i.e., less than $250,000), public access may be limited; the increase in annual rounds needed will depend on the debt service incurred by the capital investment. The size of that debt service will also affect the feasibility of the contractor's offering military discounts on greens fees. For the construction of new courses, we conclude that all users can expect to pay the market rate. Moreover, the length of the contract term will also be affected by the debt service and hence the amount of capital improvements. For a new golf course for instance, the industry does not expect to break even until about the fourth year. These early losses and the associated risks must be counterbalanced by a contract term long enough to make the risks worthwhile — about 30 years for a new course and about 20 years for major capital outlays on an existing course.

We further conclude that to be successful, the contractor's operation must include the right to sell food and beverage. Excluding those services from the contract and keeping them in house is likely to reduce the number of quality
Finally, we conclude that the complex mix of factors affecting the success of a golf course calls for careful study of each site before a P/PV is structured and attempted. For example, the 10 "rules of thumb" listed below can be used as an initial feasibility test by installations considering a P/PV golf course. If an installation cannot meet the points raised by this initial exercise, the P/PV option is probably not worth pursuing. If, on the other hand, the exercise indicates a high probability of success, the installation should conduct a detailed, individualized market analysis and feasibility study.

1. A P/PV will have to be open to the general public because a military installation does not have a large enough population to sustain the debt service required to develop a course. Thus, the parcel of land chosen will probably have to be outside the secure area of the installation to allow the public easy access. Some public relations work with the local community will probably be necessary to avoid the perception of unfair Federal Government competition in the marketplace.

2. The general population of the area, including the military community, must be able to support such an additional golf course. We can determine its ability to support one more course by looking at the average number of annual rounds for each course based on the estimated size of the golf-playing population. The average U.S. golf participation rate in 1988 was 9.5 percent of the population. That percentage varies widely from state to state and from rural to urban areas within each state. The lowest is 4.4 percent in Washington, D.C., and the highest is 15.9 percent in Wisconsin. A rough rule-of-thumb is to use 8 percent for the participation rate and to assume that 20,000 to 30,000 people living within a reasonable driving time will support an 18-hole golf course. Another rule-of-thumb used by planners is that golfers will not drive more than 20 miles or 30 minutes to a course on a regular basis. Also, in 1986 and 1987, the golf-playing population averaged 19.4 annual 18-hole rounds per person, a number that should help to provide a rough estimate of potential annual rounds for a new course. The existing courses with which the new course would compete must then be examined to see whether their annual rounds exceed or fall below the average and whether any market share remains for a new course.

3. The interest shown by the golf industry will be in proportion to the value of the land the installation is offering. An installation surrounded by
low-priced land will not have as much bargaining power as one surrounded by prime real estate.

4. The lower the bargaining power the installation derives from land advantages, the more flexibility it must be willing to give the contractor. Normally, it must expect to allow the contractor to offer all normal services found at many golf courses today, including food and beverage and banqueting and catering services.

5. The contractor is unlikely to be able to offer discounts for military users. Profits are extremely sensitive to that factor, and fixed costs for a new course are very high.

6. The greens fees must be high enough to support the golf course. The contractor will set the fees according to the quality of the course and the fees charged by the competition. If fees at competing courses are artificially low, a P/PV contractor may not be able to generate the needed revenues to support a new course. A course may charge artificially low fees because it is a subsidized municipal course or because it has no remaining debt service and its management is not taking advantage of the market opportunities. The average fee for 18-hole public courses in 1986 was $8.50 on weekdays and $10.00 on weekends. In 1989, this would be equivalent to $9.55 on weekdays and $11.25 on weekends.

7. The installation must be prepared to accept a long contract, probably one for 30 years.

8. The mission and population of the installation must be stable or increasing for the foreseeable future. Any projected decline in the military community's population, whether active duty or retired, will increase the risk for the venture. Agreements must be reached with the major claimant or the NMPC to cover the buy-back guarantee in the case of a 50 percent drop in the military population. The risks involved must be studied carefully.

9. The physical location must be amenable to a golf course. It must be built on good soil and have access to water. A regulation course will use between 1.5 million and 3.5 million gallons of water per week depending on the climate and type and extent of turf. Access to highways is also important, especially since the course will be open to the general public. Needless to say, since the public will be using the course, it cannot be located within an explosive arc or other danger area.

10. Finally, the installation must determine how well a P/PV would fit into the installation's MWR program. Is the installation management willing to allow a contractor the flexibility to control prices and set most policies? Is the installation's population going to perceive the lack of military discounts as an erosion of their benefits? Will the competition from golf course food
and beverage and catering and banqueting services hurt the clubs? These and other tradeoff questions must be addressed before embarking on such a major venture with the private sector.

Recommendations

Based upon our findings and conclusions, we recommend the Navy take the following actions.

- *Installations should be prepared to open courses to the general public.* Unless existing course operations are extremely healthy and require no capital improvement, it will not be economically feasible to restrict patronage to the military, their dependents, and retirees.

- *For new courses, the installation should be prepared to pay full market price for greens fees and be prepared for a contract term of 30 years.*

- *For all courses, the P/PV contract should give the contractor the right to serve food and beverages, thus giving the contractor maximum management flexibility.*

- *Finally, before any action is taken to contract for a new golf course, the proposed site and market conditions should be studied to determine whether they can support a P/PV.*

MARINAS

Navy Marinas

Sailing and boating are popular sports among active duty Navy personnel. Most of the use and revenues at Navy marinas, however, come from military retirees. Navy marinas offer boat rentals, sailing lessons, slip and mooring rentals, and dry storage spaces. They do not offer some services and amenities found in private-sector marinas such as boat repairs and cleaning. Most Navy marinas are small, having fewer than 100 slips and moorings each. Only 7 Navy marinas have 100 or more slips and moorings, 9 have 30 to 99, and 11 have fewer than 30. The small sizes of Navy marinas have important implications for P/PV approaches.

Test Sites

The test sites for marina P/PVs were NTC San Diego, NAVSTA Treasure Island, and NAS Jacksonville. NTC San Diego is one of the three basic training centers for the Navy and the only one located on the West Coast. It dates back to the early 1920s, has developed into over 550 acres of land, and constitutes the largest
Navy training installation on the West Coast. No ships are stationed at the installation. NTC San Diego has approximately 90,000 authorized users as follows:

- 15,500 active duty personnel
- 25,000 dependents
- 700 DoD civilians
- 49,300 military retirees.

Since no ships deploy to or from NTC San Diego, the population is relatively stable. However, since most of the active duty personnel are in training, they stay for relatively short times. NTC San Diego currently has a marina with 26 sailboat slips, 8 powerboat slips, and 111 dry storage spaces. The installation had a $1.75 million NAF project to expand the marina. That project consisted of a floating dock for 40 sailboats; a boat crane; a fixed approach pier and gangway; a marina support building with offices, storage space, a resale store and stock room, issue space, classrooms, and restrooms; utilities; and site improvements.

NTC San Diego marina revenues in FY87 were $101,238 and expenses were $155,691. Thus, revenues covered only 65 percent of expenses; however, that computation does not take into account the cost of maintenance and repairs, which are a subsidized expense, nor does it take into account the cost of various capital improvements, which are treated like grants from NMPC's central NAF. Furthermore, the expenses do not include employee benefits since they are paid from NMPC's central NAF.

NAVSTA Treasure Island is centrally located in the San Francisco Bay on a manmade island that adjoins the natural island of Yerba Buena and has a prime waterfront location. The base, approximately 6 miles from the center of San Francisco, is accessible by land over the San Francisco-Oakland Bay Bridge. NAVSTA Treasure Island is homeport to four Navy Reserve Force frigates and two minesweepers. The installation is also a major Navy training center with the Naval Technical Training Center being its largest tenant activity. NAVSTA Treasure Island has a potential market of 86,000 authorized users as follows:

- 21,000 activity duty personnel
- 19,000 DoD civilians
• 3,000 others
• 43,000 military retirees.

The existing marina at NAVSTA Treasure Island has 100 slips constructed of wood on foam insulation. The marina is in a state of disrepair because of deferred maintenance and needs to have piles replaced, electrical service upgraded, flotation replaced, and major repairs performed to the main pontoon barges. The cost of this effort is estimated to be $250,000.

NAS Jacksonville is the primary host command of the Naval Complex Jacksonville with control of approximately 3,800 acres of land. Today, the station supports fleet aviation units and over 50 tenant activities. NAS Jacksonville has a potential market of about 66,000 authorized users as follows:

• 37,200 active duty personnel
• 8,800 DoD civilians
• 3,500 others
• 16,500 military retirees.

Information on the number of these authorized user boat owners that rent slips (wet or dry) at NAS Jacksonville was obtained from several sources:

• Extracting information on NAS Jacksonville Yacht Club members
• Specifically for this study, making a marina usage questionnaire available at strategic locations on the installation
• Reviewing information from a 1987 comprehensive recreation survey conducted at NAS Jacksonville.

Based on these sources, we estimated demand rates for various segments of the authorized user boat owner population. The estimated demand rates, and resulting estimated number of wet and dry slips desired, are summarized in Appendix O. The low estimate, which we used as the baseline in our financial analyses, and also recommended as the minimum size for initial development purposes, is 275 total wet slips and a total of 225 dry storage spaces. The high estimates are 420 total wet slips and 355 total dry storage spaces.

The existing marina at NAS Jacksonville has 21 wet slips, 63 moorings, and 140 dry storage spaces. Of the total number of boats in the water, 89 percent are
sailboats and 11 percent are powerboats; expectedly, the majority of boats in dry storage are power boats (approximately 70 percent). The size ranges of existing boats are from 15 feet in dry storage, up to 35 feet in the wet slips, and up to 45 feet in the moorings.

**Industry Characteristics**

In a real estate context, the term "marina" can apply to a tremendously wide range of facilities, from a small community pier with a handful of boat slips to a 2,000-slip municipally owned marina that helps to support dozens of associated businesses and development projects. In the private sector, the term "marina" refers to the facility that is also called boatyard, yacht club, community dock, town dock, etc., serving recreational craft. In addition to providing space for mooring boats, the marina facilities often include the following services:

- Launching ramp
- Fuel docks
- Hull and engine repair shops
- Sales rooms for boats, engines, and accessories
- Open or enclosed dry boat storage
- Boat haul-out facilities (crane, travel lift)
- Restrooms, showers, and locker rooms
- Chandlery
- Restaurants
- Groceries
- Bulk ice
- Bait and tackle
- Propane gas
- Laundry facilities
- Gift shops
- Parking lots.
There are no major operators or chains in the marina industry similar to those found in the golfing and bowling industries. Most marinas tend to be small, independently owned operations with the exception of a few larger operators who tend to remain in specific geographic regions such as the northeastern United States. The industry is not mature; however, a number of operators have indicated an interest in the concept of P/PVs at military installations.

Some operators are interested in packaging several marinas under one contract provided they are in the same geographic region. The owner-operator can then realize the economies of scale and share some of the management functions. However, the industry is also willing to consider a P/PV at only one military installation. The desire to package extends to other MWR functions, such as club operations, even though marina operators are not restaurant operators. The marina operators would likely subcontract any additional functions packaged with a marina.

The private sector has a proven history of success in P/PV operations. One of the best known examples of a successful P/PV marina is Marina del Rey in Los Angeles County, California. Another example of a P/PV is the marina at Racine, Wisconsin, on Lake Michigan. After undergoing a gradual economic decline through the 1980s, the city of Racine turned to its waterfront as a means to spark a dramatic downtown reinvestment by private developers. Additional examples include the numerous marinas that have been developed through P/PV agreements with the U.S. Army Corps of Engineers and the National Park Service. Furthermore, the interest in developing partnerships between local jurisdictions and private operators continues to grow. A P/PV proposal for a marina is under consideration in Woodbridge, Virginia, on the Potomac River.

**Marina Development Project Issues**

One of the most important issues to consider in developing a P/PV marina is the environmental effect and the impact the marina has on public coastal development policy. Compliance with the National Environmental Policy Act (NEPA) requires that early planning for projects consider the environmental impact of each alternative. An environmental assessment (EA) must then be prepared, which results either in a finding of no significant impact (FONSI) or an environmental impact statement (EIS). The EIS requires far more detailed information than an EA and must be discussed with the public in open scoping meetings.
are then incorporated into the EIS before the agency's decision becomes final. Environmental regulations have lengthened the marina approval process, required costly environmental impact mitigation measures, and greatly reduced the number of potential marina sites.

Dredging is one of the primary environmental impacts. The waters of many marinas are not deep enough to accommodate all recreational craft, and sites are often dredged during their initial construction. However, the most common dredging practice in marinas is maintenance dredging to remove sediment from small problem areas in boat channels or near docks. The act of dredging and disposal of sediment may adversely affect the marine environment. The severity of that effect is not always the same and is dependent upon the dredging method used and the characteristics of the bottom sediment and its inhabitants. Dredging may alter the marina and the adjacent waters by increasing turbidity, reducing oxygen content, causing the buildup of sediments and burial of benthic (bottom-dwelling) organisms, disrupting and removing bottom habitat, creating "stagnant deep water areas," and altering water circulation. If maintenance dredging is expected, the plans must include a choice of sites for disposal of dredge materials.

Site location is another important issue that must be considered when developing a P/PV marina. The site requirements for a marina should be considered in view of recreational convenience, safety, and security. A marina must offer safe access to a usable body of water.

The degree to which the public interest affects the feasibility of a proposed P/PV marina depends largely on the potential project's location. In some areas, a project may be subject merely to a few regulations, required permits, or applications for approval. In other areas, the potential P/PV marina may have to overcome a long line of hurdles presented by state and Federal agencies, regional coastal commissions, environmental groups, and a host of others.

Physical site selection variables can be divided into two categories: onshore characteristics and offshore characteristics. Onshore factors for marina site suitability do not differ much from site suitability for any other facility: appropriate access, enough space, adequate soil properties, etc.

In evaluating offshore conditions for a potential P/PV marina, water depth should be considered first. An ideal minimum depth is 8 feet below the mean low
water datum. While many sites can be dredged to create a deep enough basin, the
cost of dredging depends mainly on the physical and chemical make-up of the bottom
materials. If dredging is not allowed for environmental reasons, shallow sites will
restrict the sizes and types of boats that can be accommodated. A very deep basin, on
the other hand, may not provide adequate protection from wave action and will limit
pier design alternatives.

Another issue that must be considered is safety — the marinas need to be
protected from wind and wave action. Wind patterns affect wave patterns, which can
cause substantial damage to a marina. A number of engineering measures are
available to protect a marina from waves, but their effectiveness depends on careful
analysis of existing conditions.

The market analysis ... a P/PV marina project should encompass two basic
areas of information: the demand characteristics of the locally targeted boat market
and the capacity and quality of existing marina facilities. The market analysis
should start with local demographic and economic data.

Beyond the typical demand factors, the Navy needs to understand the local
boating environment. A first step would be to conduct a survey to determine the
number of registered boats in the expected market area, the per capita rate of boat
ownership, the types of boats owned, and how those boats are used. Nearby public
and private marinas and yacht clubs should be carefully evaluated to determine
whether the proposed P/PV marina will be competitive or complementary. Besides
the size, number, and types of crafts and berths, the Navy will also need to check on
the kinds and levels of service offered and the rate and fee structure of existing
facilities, including slip rentals, yacht club memberships, and other agreements. The
survey should also include occupancy levels as well as plans for expansion.
Information on existing marina waiting lists will also prove valuable.

Economic Analysis

We performed an economic analysis of the feasibility of P/PV marinas by
constructing quantitative models of the expected financial operation of a privately
owned and operated marina at each test site. Appendices K through P contain the
specific methodologies and results of our economic modeling and the resulting RFPs
for NTC San Diego, NAVSTA Treasure Island, and NAS Jacksonville. We based our
demand (e.g., slip rentals) projections on the authorized user population and known
boat ownership rates for each market area. We estimated the costs for in-house and P/PV marinas separately. Private-sector costs were based on a Western Illinois University study.\textsuperscript{2}

Included in the pro forma financial model were the capital costs of expanding the marina facilities and the amortization of financing and depreciation of capital assets paid for by the private contractor. We also assumed that the contractor would establish an escrow account of 3 percent of gross slip-rental revenues and would use that account for continuing capital improvements over the life of the contract. In addition to construction costs, the economic analysis ascertained a variety of operating costs, which will clearly vary with the proposed level of services. Revenue estimates were based on an assessment of local slip rental and service rates. Taxes, insurance, and other overhead items needed careful attention. At the Federal level, for example, floating piers are considered equipment, not real property. Thus, they are eligible for certain tax credits and special depreciation provisions.

Our economic analysis for NTC San Diego indicates that a P/PV for a marina expansion would be attractive and economically successful under appropriate conditions. The appropriate conditions were a 25-year contract term; slip rentals, boat rentals, and dry storage fees limited to 75 percent of median market of comparable facilities; food, beverage, and chandlery operations and revenues accruing to the contractor; and a patron market limited to currently authorized users, including DoD civilians. We estimated that a P/PV contractor could add 200 sailboat slips, 50 powerboat slips, and 100 dry storage spaces; make a reasonable (i.e., industry average) profit; and share some additional profits with the installation’s NAFI. That estimated success is in contrast with the current and projected operating losses of the existing marina. The current operating loss accruing to the local NAFI is made even larger by the employee fringe benefits paid out of central NAF. Just as important, under a P/PV arrangement, the Navy would not have to spend $1.75 million of its own scarce NAF it had approved for its internal project to pay for capital improvements that a P/PV would provide (the developer would provide a total of $2.7 million in capital improvements).

Our economic analysis for NAVSTA Treasure Island indicates that a P/PV for a marina expansion would be attractive and economically successful under the same

conditions established for NTC San Diego. We estimated that a P/PV contractor could add 150 wet slips, make a reasonable profit, and share approximately $125,000 per year with the installation’s NAFI. That estimated success is in contrast to the station’s current operating profit of approximately $65,000 annually which does not take into account employee fringe benefits paid out of central NAF. Additionally, the Navy would not have to spend $2.1 million of its NAF to pay for necessary repairs and desired capital improvements.

Our economic analysis for NAS Jacksonville indicates that a P/PV for a marina expansion would be attractive and economically successful under the same conditions established for NTC San Diego and NAVSTA Treasure Island. We estimated that a P/PV contractor could add 254 wet slips and 85 dry storage spaces, make a reasonable profit, and share approximately $125,000 per year with the installation’s NAFI. That estimated success is in contrast to the station’s operating profit of approximately $80,000 annually. Current profit does not take into account employee fringe benefits paid out of central NAF. Additionally, the Navy would not have to spend $3.1 million of its NAF to pay for necessary repairs and desired capital improvements.

Conclusions

Navy marinas are excellent candidates for P/PVs. Marinas are lucrative businesses and they even make a profit with very few slips. They can also be profitable at rates lower than the average market. Food and beverage sales can affect profitability but they are not crucial to the success of a P/PV marina. One caution is that the marina industry is not a mature one and it is fractured and changing. Marina P/PV contracts may need more oversight than those of other P/PVs. The length of the contract term will be affected by the debt service and hence the amount of capital improvements. If, for example, a large amount of capital improvement is needed, the contract term should be long enough to counterbalance the large debt service and associated risks. In establishing or expanding a marina, an installation must identify environmental issues early to assist in project planning. These issues can easily delay a project if not addressed early.
Recommendations

Based on these findings and conclusions, we recommend that the Navy take the following actions for P/PV marinas:

- Actively pursue P/PV marina opportunities at all installations on the water.
- Make environmental considerations a part of the initial decision on whether to pursue a P/PV marina.
- Maintain tighter control on marina P/PV contractors than on contractors for other P/PVs.
- Allow the contractor to offer only minimum food and beverage (do not permit large restaurants, catering/banqueting, etc.).
- Limit slip rental fees for military personnel to 75 percent of the comparable median market rate.
- Restrict P/PV marinas to military personnel unless it is absolutely necessary to admit the general public. Civilians should be required to pay the full market rate.
- Make the length of the contract term with the contractor approximately 25 years if many capital improvements are necessary.

CLUBS

Navy Clubs

Membership in Navy clubs is often encouraged, especially for officers. The clubs usually include restaurants, formal and casual lounges, snack bars, meeting rooms, and ballrooms. They offer entertainment and serve as meeting places for official functions as well as private parties. Sundry other services may be offered such as pizza delivery and barber shops.

The Navy is reviewing the purpose and future of clubs in general, an important issue that none of the installations we visited had considered in depth. That issue leads to such questions as, "Is the purpose of clubs primarily to be an alternative restaurant to general mess? Does the club exist to enhance esprit de corps among the separate groups of active duty personnel (officer, senior enlisted, junior enlisted)? To what extent should clubs cater to retirees and for what reason?" Answers to these
and other issues about the mission of Navy clubs will critically affect the success of the club system, either with or without P/PVs.

The Navy is pursuing a range of possibilities for clubs as it attempts to determine the purpose and future of clubs. One alternative the Navy is developing is "theme" restaurant and lounge prototypes that can be exported as total packages to almost any installation. A sports bar, with a sports decor, ambiance, and amusements is one example of theme approach. Another example is an ethnic restaurant (e.g., Mexican). In each case, menus, decor, and management are centrally developed at NMPC, tested at an installation, and exported as a total concept.

Navy tradition has been to retain tight control over all aspects of club operations including the segregation of ranks into different facilities. Consolidation of club facilities is a highly sensitive issue at Navy installations especially if it involves mixing officer and enlisted personnel. The most commonly discussed of the different forms of consolidation is having two or more clubs share the same kitchen but have separate dining areas and entrances. That form of consolidation could raise objections if it also meant consolidated parking lots. Installation commanding officers are also concerned about relinquishing control over menu and price. Navy personnel at the installations we studied still want separate club facilities and wish to have the clubs run according to their own goals, however elusive or unprofitable those goals may be.

Ambiance and other factors that make a successful club are difficult to quantify in a P/PV contract. First, the Navy and the local installation must clearly know what kind of atmosphere and program goals they want from the club operation. Regulations and incentives would have to be thought of, agreed to, and integrated into the P/PV contract to achieve these goals. The Navy is still defining club program goals and the other qualitative aspects of what constitutes a "successful" club system. Regulations and incentives will have to follow.

Many P/PV restaurants, lounges, and cafeterias operate successfully. We discussed food and beverage P/PVs with the National Park Service and the General Services Administration, as well as with their P/PV contractors. However, we could not find P/PV examples of clubs as such. In the next section, we describe the test sites
we selected, and in the following section, we discuss the type of food and beverage industry that might participate with the Navy in club P/PVs.

Test Sites

The club systems we looked at are located at relatively large installations with relatively large populations of authorized users in all ranks, and they are still having difficulty making a profit. Furthermore, their losses are not easily compensated for by profits, if any, of other MWR revenue generators.

The first test site was the club system at NTC Orlando, one of the Navy's three training centers for new recruits and basic training graduates. NTC Orlando has a potential market of 17,000 authorized users as follows:

- 12,000 active duty personnel
- 3,000 dependents of active duty personnel
- 1,000 DoD, NAF, and contractor personnel
- 1,000 military retirees.

Although those users represent a relatively large market, the club system at NTC Orlando faces relatively stiff competition from many restaurants in Orlando and in the nearby area surrounding Disney World.

The NTC Orlando system consists of three clubs: an on-base officer's club, an enlisted club, and an all-ranks club that is located off base in a family housing area.

For our second test site, the club systems at NAS Alameda and NAS Moffett Field both volunteered. Our background research of both sites and of the industry led us to conclude that the best course of action for feasibility and study purposes would be to pursue a packaged club P/PV that included both Naval Air Stations.

NAS Alameda is a relatively large installation, with carrier-based aircraft and 12 ships, including aircraft carriers. It houses three clubs: an officers' club, an enlisted (E-1 through E-5) club, and a "top four" enlisted (E-6 through E-9) club. The 21,000 authorized users at NAS Alameda clubs are divided as follows:

- 12,000 active duty military personnel
- 3,000 dependents of active duty personnel
- 5,000 DoD, NAF, and contractor personnel
- 1,000 military retirees.

NAS Alameda is located on the east side of San Francisco Bay less than a mile south of the Bay Bridge. The clubs there face substantial off-base competition from the large number and variety of eating and drinking establishments in the Bay Area. In addition, clubs at a number of other military installations in the Bay Area may be regarded as competition. However, those other military clubs may also be regarded as part of the potential market for a good P/PV contractor. In fact, NAS Alameda club managers stated that they currently receive some patronage from NAVSTA Treasure Island and NAS Moffett Field.

NAS Moffett Field is also a relatively large installation. It is a homeport for maritime patrol aircraft, and it hosts part of National Aeronautics and Space Administration (NASA) with 1,700 employees. The Lockheed Corporation, adjacent to the installation, employs 30,000 people, and many of the Lockheed managers use the officers’ club, especially for parties. It houses three clubs: an officers’ club, a Chief Petty Officers’ (CPO) club, and an enlisted club. The 22,000 authorized users at NAS Moffett Field are divided as follows:
- 4,900 active duty personnel
- 12,300 dependents of active duty personnel
- 600 DoD, NAF, and contractor personnel
- 1,700 NASA employees
- 2,500 military retirees.

The clubs at Moffett Field have an excellent market from which to draw patrons. The population does not fluctuate significantly since there are no shipboard personnel.

The club facilities we considered for our study are old, large, and inefficient in most cases. For example, the officers’ club at NAS Alameda was built in 1948 and contains 29,000 gross square feet, a relatively large facility given the number of active duty officers and retirees. It has five dining rooms that range in capacity from 30 to 400 seats, with a total seating capacity of 905. NAS Alameda has only 400 officers, and so, even with dependents, active duty officers cannot fully utilize the club. Even though the club is well used by retirees and others, it still needs subsidies
to make a profit. The officers' club at NAS Moffett Field is also old, also too large given the number of active duty officers and retirees, and also in need of subsidies to realize a profit. The enlisted, CPO, and all-ranks clubs at all the installations tended to suffer from the same problems. Furthermore, most of them need or will soon need major repairs and renovations. Because of their losses, these clubs cannot afford such repairs and renovations.

Patron markets at our test sites are relatively large in all ranks except for officers, but the officer market is bolstered significantly by retirees. Our market study of the NTC Orlando clubs revealed that the majority of the patrons at the officers' club are retirees. We found that the mix of products varies by the type of patron market. While the officers' clubs depend on food sales for the majority of their revenues, the enlisted clubs depended on beverage sales, cover charges, and special events for the majority of their revenues.

Club management at the test sites is less skilled, in general, than it is in the private sector. Many of the club managers at our test sites were former military personnel who received their training (if any) while on active duty. By contrast, managers of similar-sized restaurants and clubs in the private sector usually receive many months, or several years, of training in all areas of operation — service, management, personnel, and financial operations. In addition, unlike private-sector managers, Navy club managers are underutilizing financial and professional advancement incentives to increase revenues and decrease costs.

**Industry Characteristics**

The retail food and beverage industry has three distinctively different components: cafeterias, restaurants, and clubs. Companies operating in one component do not usually operate in a second one, except for some national chains that have both cafeterias and restaurants. We discussed the concept of Navy club P/PVs with representatives of large and small operations in each industry component. None of the three components of the industry is exactly analogous to the Navy club system.

The cafeteria component of the industry concentrates on food sales, with relatively minor beverage sales and virtually no special events or other programming. We met with the major companies including Guest Services, Inc.; Morrison's Cafeteria, Inc.; and Restaura, Inc. Theme establishments (e.g., ethnic or
geographic emphasis) and table service in the cafeteria component are rare. The main thrust of the business is high-volume, self-service, generic-menu, good-quality, medium-price meals. Ambiance and other qualitative factors are fairly standard across companies in this component of the industry. Automation, portion control, waste management, sales predictions, and other strict cost control measures are standard. For example, from the computerized cash register records, a company in this industry can predict with reasonable accuracy the number of pieces of pie it will sell at Tuesday lunch for a given cafeteria location as well as the ratios of raw materials to final sales. Variances are quickly noted and managerial actions taken to correct small problems before they become large problems. Managers and assistant managers are professionally trained. Profit margins are relatively low. A few of the larger companies have experience in operating cafeterias as part of a package with such recreational activities as marinas and golf courses.

The restaurant component of the industry, while also concentrating on food, has substantial beverage sales and often has special events or other programming. The companies with whom we met include Marriott Corporation, and American Cafe. This component has experience in arranging for entertainment, catering parties, etc. Theme establishments are common, and table service is the rule. The main thrust of the business is to find a market niche (e.g., theme, price, or location, etc.) and to provide high-quality food, beverages, and ambiance at a commensurate price. Profit margins range from low to high, depending on local market conditions and the ability of the restaurant to establish itself within its defined market niche. Managers and assistant managers are professionally trained and may have a college education. Most of the larger, national chains have experience in owning and operating restaurants as part of a package with such recreational activities as marinas and golf courses.

The club component of the industry concentrates on all three aspects of the business: food sales, beverage sales, and special events and programming. We met with the dominant member of this component, Club Corporation of America. A distant second is Club Development, Inc., which is owned by Hyatt Hotels. Members of this component are constantly arranging for entertainment, catering parties, and arranging other special events for club members. The industry consists of city clubs and country clubs. A number of companies contract to run both city and country clubs, but the industry is dominated by a few large firms, which even own many of
the city and country clubs. The club component is the only one of the three that deals with restricted patron markets (i.e., only authorized users and their guests). However, the membership of city and country clubs is dominated by high-income persons, many of whom receive the membership and/or expenses as a company benefit. Further, such clubs typically lose money on their operations and recoup those losses by charging relatively high membership fees (initiation and dues). Profit margins are high for the companies that contract to run clubs. Management is professionally trained and, usually, college-educated. All of the companies have experience in owning and operating clubs as part of a package with such recreational activities as marinas and golf courses.

All three components of the industry are interested in participating in P/PVs for Navy clubs. However, each would approach operations from its own experience and business thrust. The components of the industry are highly competitive, especially the cafeteria and restaurant sectors. Those sectors tend to operate on low-to-medium profit margins and achieve success only through efficient management and responsive marketing and pricing. All components of the industry typically deal with relatively short contracts — 3 to 5 years — that contain bailout clauses if the operation cannot be made profitable. They would prefer to have similarly short contracts for Navy P/PV clubs but realize that longer contracts are necessary when they must invest significant capital.

The industry uses a regional management and financial approach to take advantage of economies of scale. Companies in all components of the industry have a regional geographic management structure that enables them to closely monitor, compare, and manage individual outlets in each geographic area. In addition, they achieve financial economies of scale by purchasing, storing, and distributing products within the region and by spreading administrative overhead (e.g., accounting, legal, etc.) over the most efficient network of locations. All components of the industry would prefer regional packages for clubs so that they could fit Navy clubs into their existing management structures to achieve the same economies of scale.

The industry is also quite willing to attempt P/PV packages that bundle clubs with other recreational activities such as marinas, golf courses, and even bowling centers.
Economic Analysis

Appendix Q presents a summary tabulation of the income and expense statements for the club system at NTC Orlando for FY87. The clubs there lost a combined total of about $360,000 that year. Appendix R presents summary tabulations of similar financial statements for the club systems at NAS Alameda and NAS Moffett Field. Despite their relatively large authorized user market, those two club systems lost approximately $300,000 between them.

The losses, in our opinion, are due to several factors. Too many facilities and facilities that are too large for the base population cause the overhead to be too high, and compared to the private sector, wages, salaries, fringe benefits, and cost of goods sold are higher percentages of program revenues.

Our economic analysis for NTC Orlando shows that a P/PV club system is feasible under the assumptions of slight increases in patronage and prices that the private contractor would be able to achieve with increased quality of service and modest capital improvements. The capital improvements would be the responsibility of the contractor and would revert to the NAF at the end of the contract. The P/PV club operation would be more profitable to the Navy than an in-house operation with the same price and patronage increases.

Our economic analysis for NAS Alameda and NAS Moffett Field indicates that a P/PV package for the two sites is feasible without significant price increases. Not only would such a package eliminate the current unsubsidized losses but it would likely return some profit sharing to the installations. Furthermore it would also provide a source for continued capital improvements to the facilities. The regional package would be more profitable than stand-alone club systems.

Conclusions

Public/private ventures for clubs are feasible but marginal. Moreover, their feasibility will be greatly affected by the results of the ongoing Navy review of the future missions and goals of its clubs. The decisions need to be made as soon as possible if the Navy club system is to respond effectively and in time for the elimination of all appropriated fund subsidies on October 1, 1990. The Navy's club system is already financially troubled. Delaying these decisions may make it more
difficult for the system to respond in a timely manner and result in closing existing clubs or converting them into self-supporting banqueting and catering facilities.

The number of the authorized users must be sufficient to support a club if the P/PV is to succeed since the Navy does not plan to open clubs to the general public. Furthermore, the P/PV contractor must be given the authority to let prices, menus, and services be market-driven. Private sector companies will not be interested in P/PV contracts that tie their hands on all counts—patron market, prices, menus, and services—and fail to give them the flexibility to apply their entrepreneurial skills for the benefit of the sailors, the NAF, and themselves.

Consolidated clubs are more efficient. Few installations have enough officers and retirees to support a separate officers’ club. Support for many large, old, separate facilities is inefficient. P/PV contractors can offer alternatives consistent with the Navy’s missions and goals for clubs.

All sectors of the industry are interested, experienced, and capable of financing and operating P/PV clubs for the Navy. They have well-tested management, financial, and marketing skills that could be applied to the Navy club system. Regional packaging of clubs offers economies of scale that can reduce prices of services to the sailor and increase the amount of profits shared with the local NAF.

None of the three industry components is an exact match for the current Navy club system. The cafeteria component lacks programming, table service, and ambiance. Similarly, the club component is not a very good fit because of its relatively high prices and the dues characteristic of the industry. The restaurant component fits slightly better than either of the other two with the Navy club system because of the similarity of its food, beverage, and ambiance characteristics. The exact components or combinations that would best fit Navy clubs will also have to await a decision on what the Navy wants in the way of future club missions and goals.

Some subjective mechanism is needed to control the ambiance of the clubs and other subjective factors through the life of the contract. Such a mechanism will partially compensate for the perceived loss of control over prices and menus.

Public/private ventures for Navy clubs are economically feasible. They offer a needed outside source of funds for repair, maintenance, and major capital
improvements of club facilities. In those situations in which they are feasible, P/PV clubs can help to stem the financial drain on other MWR revenue generators.

Clubs can probably be packaged with other recreational activities, such as marinas and golf courses, into successful multi-MWR activity P/PV projects.

Recommendations

Based on our findings and conclusions, we recommend that the Navy take the following actions:

- **Determine the future missions and goals of clubs**
- **Actively pursue P/PVs for clubs where feasible**
- **Package clubs across installations and across other MWR functions**
- **Promote consolidated facilities in-house or in P/PVs**
- **Use short-term (i.e., 3 to 5 year) contracts without price or menu controls**
- **Consider using award fee contracts as quality control incentives (see explanation below)**
- **Act on the club situation quickly to mitigate possible large-scale shutdowns and changes that will otherwise be forced by the elimination of appropriated funds.**

One type of contracting mechanism that would be feasible for P/PV clubs is the award fee contract, in which some percentage or dollar amount of revenues or profits is set aside and can be used by the contracting officer as an award to the contractor for achieving specified performance goals in a quarter. Those performance goals may be purely subjective. For example, if the contracting officer wants more participation in the officers' club by junior officers, that becomes the goal for the quarter for the contractor. At the end of the quarter, the contracting officer judges the extent to which the contractor has achieved the goal and awards a portion of the quarter's set aside to the contractor. Award fee contracts are permitted under the Federal Acquisition Regulation (FAR) and have been used successfully in the past.
MOTION PICTURE THEATERS

Navy Motion Picture Theaters

The current distribution channel used by Navy theaters is the Navy Motion Picture Service (NMPS). It is responsible for managing film and tape distribution to all ship and shore locations in the United States and overseas. Leasing rights for films are directly procured from the film studios. For each movie, NMPS orders 38 16mm prints and about 750 video tapes, which it leases for a term of 3 to 4 years. Films and tapes provided to overseas or remote sites and ships are procured with appropriated funds. For all other on-base theaters, NAF are used. In FY88, NMPS received approximately $2 million in NAF support for on-base theaters. The installation pays nothing for film rentals and does not pass on to NMPS any portion of its ticket revenues.

The Navy is one of the few organizations left that still use 16mm film prints. The private sector and the other Services have changed to the 35mm system which produces a higher quality image but requires professional projectionists to operate it. The Navy has stayed with the 16mm system for a number of reasons. First, the cost to convert a theater to the new system averages $120,000 and the funds are not available. Second, films could no longer be shown in clubs and chapels as is often done now. Finally, operating costs would be higher because 35mm prints are more expensive to ship and trained projectionists are more expensive to hire.

The disadvantages with the current 16mm system are the relatively poor quality of the image and sound compared to 35mm system and the long delay before the studios release 16mm film. The typical film is shown 6 to 12 months after its premier, at about the same time it appears on cable television and is released for home video sales.

Test Site

The Naval Base (NAVBASE) Norfolk was selected as the primary test site for the use of Navy motion picture P/PVs for two reasons: it has a large population, and a new shopping mall is about to be constructed. The mall offers a site for a theater in a well-traveled location, outside of the installation's secure area. Because market size was considered to be the single most important factor in determining theater feasibility, using NAVBASE Norfolk, the Navy's largest base, gave the P/PV concept
the greatest chance of success. If it could not be feasible at NAVBASE Norfolk, it is not likely to be feasible at smaller bases.

NAVBASE Norfolk currently operates a main theater on base as part of its MWR activities. The theater building, constructed in the 1950s, was originally designed as a large auditorium. Its total seating of 1,300 is split between the main-level theater and a balcony. When movies are in progress, seating is restricted to the 615-seat main level. The theater is large, has poor acoustics, and has a 35-year-old monaural system not suitable for conversion to Dolby stereo or “surround sound.” Films use a 16mm format and are projected onto a flat screen. The theater does not have a full-service concession stand but instead uses vending machines. The Navy has no plans to replace equipment with more modern technology, nor does it plan to build a new theater either on or off base in the near future.

NAVBASE Norfolk shows two different movies a night, one at 5:30 p.m. and the other at 9:00 p.m., with the two films alternating times on successive days. All shows at the theater are open to authorized users: military members and their families, reservists, and retirees. The potential market of approximately 116,000 authorized users is as follows:

- 28,000 shore-based personnel
- 24,000 fleet unit personnel
- 7,000 students and transient personnel
- 57,000 Navy dependent personnel.

While military retirees are authorized to use the theater, they do not do so very often. Civilian employees are not authorized to use it. Theater attendance ranges from less than 50 to more than 400 patrons per show. From July 1987 to June 1988, the theater ran more than 200 movies, with a total attendance of 48,486. The price range for movie tickets is $1 to $2 for adults and 50 cents to $1 for children, depending on the movie.

Part of NAVBASE Norfolk’s interest in a P/PV theater is due to available space in an off-base shopping mall currently under construction. The new mall will house the Navy Exchange, Commissary, and various concession shops and services.
Although the design does not include a theater, 17,000 square feet of space is available for one.

**Industry Characteristics**

The theater industry has three major segments: exhibition, distribution, and production. Over the past 10 years, the dominant trend in the exhibition segment is toward large national chains. Today, four major chains – Lowe's Theaters; American Multi Cinema, Inc.; Cineplex Odeon; and General Cinema Co. – own about 50 percent of the theaters and show approximately 70 percent of the first-run films. Another trend is toward large chains establishing their own distribution channels and dealing directly with production studios.

Theater facilities are also changing. Stand-alone, single-screen theaters are no longer economically viable for most market areas. The standard for new theater construction is to locate several screens in a single facility or multiplex theater. A four-screen multiplex was considered a minimum facility for modern theaters in a competitive market at the time the economic analysis for this study was done. Today, the requirements are even more stringent and a six-screen multiplex is now considered a minimum. Theaters in the private sector place a high value on state-of-the-art technology such as curved, high-resolution screens, surround sound, and Dolby stereo systems to keep them competitive.

Competition for the exhibition rights to prime films is sharp. The cost for exhibition rights has been rising and is by far the largest single expense incurred in operations. It is often in the hundreds of thousands of dollars.

**Economic Analysis**

Analysis of the feasibility of P/PV theater operations is based on the conclusions drawn from the test site feasibility study presented in Appendix S. The approach of this analysis was to set the proposed test site parameters in a best-case scenario.
That is, the test site was analyzed under the following set of assumptions, which is the set most conducive to P/PV success:

- The Navy would charge a minimal land rent to the private owner.
- The theater complex would be open to the general public at market prices.
- The theater would be located at the Navy Exchange Mall outside of the Naval Base for easy access by the market to a high-traffic (demand) area.
- Other mall stores would be open to the general public.
- Existing base theaters would be closed.
- Ticket prices for authorized users would be discounted to at least 75 percent of market price, with civilian prices at full market price. Product and show times are market-driven.

Earlier studies of P/PVs operating Navy theaters have generally been inconclusive and have not developed the details necessary for a full economic analysis. Our analysis of P/PV operations for theaters indicates that Navy theaters are not well suited for P/PVs. This finding is strongly supported by information from industry interviews. The following three major factors are used by industry in planning and locating private-sector facilities:

- Size and composition of the market
- Competition
- Location.

In general, Navy bases do not provide the conditions required by these factors.

The population of the market area required to support a four-screen multiplex, offering first-run films is estimated at 18,000 to 20,000 people per screen. Most Navy installations do not have a population large enough to fall into that range.

Industry competition has become increasingly intense. Opening a theater to the general public is not necessarily a qualification for drawing enough market to break even. Market studies must be performed for each location on a case-by-case basis. Locating a theater on a military installation does not insulate it from outside competition, especially if it would have to rely on attendance from the general public.
Site-specific factors of many military installations limit the marketability of a theater complex. Some significant examples include the following:

- Geographic isolation, not located near a major metropolitan area
- Lack of residential developments near the base
- Lack of retail facilities such as a mall environment to act as a draw to the theater.

Conclusions

Private theater development is not an economically feasible option to providing new on- or off-base military theaters. Revenues from Navy theaters are not returned to the central NAF to cover NAF subsidies. Existing Navy theater operations are not self-supporting. At the same time, NMIPC will deplete its grant and loan funds for capital projects and will ultimately have to make a Navy-wide decision on the feasibility of continuing to provide NAF support to theaters.

Public/private venture operation of existing Navy theaters does not appear to be economically feasible. Again, the single most prohibitive factor is limited market size. Naval bases do not provide a population large enough to support a first-run theater. Several other factors significantly limit the feasibility of this approach, including the following:

- Existing theater facilities are not designed as multiplex facilities, and their conversion is viewed as cost-prohibitive by the industry.
- Existing equipment can only show films in 16mm format, whereas first-run films are shown in 35mm format. Conversion to 35mm equipment is expensive, estimated at $120,000 per screen.
- Operation of an on-base theater would limit the opportunities for opening the facility to the general public because of limited accessibility and lack of retail facilities as a draw to the theater.
- Providing a rent-free facility with no maintenance cost would not reduce operations costs sufficiently to make a P/PV operation profitable.
• Public/private venture theaters for Navy installations would not be successful and should not be considered. The populations do not provide sufficient market to cover construction and operation costs of P/PV theaters. The likelihood for success is further limited by industry competition and geographic location of many installations.

• Conversion of existing Navy theater facilities to P/PV operations is not feasible. Limited base market size and facility inadequacies cannot be overcome by free rent.

**Recommendation**

_We recommend the Navy not pursue P/PV motion picture theaters._ They are not economically feasible even under the best of assumptions. Other remedies must be sought for the continuing loss of NAF in the Navy's motion picture theater program.
CHAPTER 3
STRUCTURING A SUCCESSFUL PUBLIC/PRIVATE VENTURE

In this chapter, we address our general findings, conclusions, and recommendations relative to the P/PV concept. These findings, conclusions, and recommendations are fundamental to all MWR activities and industry segments involved, and anyone contemplating a P/PV should be aware of them before considering a specific MWR activity issue.

OVERALL P/PV CONCEPTS

Findings

The Private Sector as a Business Partner

Public/private ventures offer some remarkable opportunities for some of the Navy's MWR activities, but they are a departure from the old ways of doing business. A P/PV on an installation means that the commanding officer (CO) has relinquished absolute control over the operation. In a P/PV operation, the CO, for example, is not able to arbitrarily set the slip fees at a marina or arbitrarily determine the menu and prices at a club. Instead, the CO sets the baseline prices and operating procedures, and the parameters for change, in the original concession agreement. The private-sector operator must be given significant flexibility in that concession agreement to run the business since it is the private operator rather than the installation that is taking the business risk in a P/PV. Built-in performance incentives that act in the interest of both the concessionaire and the Navy are important to the success of a P/PV. The COs will not approve P/PVs unless they are convinced that the concession agreement structure and built-in performance incentives are worth enough to warrant giving up some control.

Public/private ventures are tainted by being associated with "commercial activities." At all test sites, the MWR program and facility managers tended to view P/PVs as contracted services, and all were displeased with that approach. At first, none seemed to understand that in important areas, P/PVs differed from contracted services; for example, P/PVs involve initial and continuing capital investment while
contracted services do not, and unlike contracted services, P/PVs receive no management fees or other payments from the installation. Thus, P/PVs constitute a much different arrangement than contracted services. During the course of our site visits, we introduced MWR managers and staff to the differences between P/PVs and contracted services. These differences are summarized in Table 3-1.

**TABLE 3-1**

A COMPARISON OF MAJOR FEATURES AMONG PUBLIC/PRIVATE VENTURES, COMMERCIAL ACTIVITIES (CA), AND NAFI PROGRAMS IN THE NAVY

<table>
<thead>
<tr>
<th>Feature</th>
<th>P/PV</th>
<th>CA</th>
<th>NAFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market factors affect operator's profit</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Major capital improvements financed and paid for by operator</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Function operated as it would be in the private sector</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Facility may be opened to public if installation agrees</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Congressional notification is required</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Operator owns its capital improvements during the life of the contract</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Conditions for PIPV Success*

Public/private ventures can only be successful in certain situations and under certain conditions. The Navy, and especially the installations, must remember that the private sector must be attracted to each individual project by the project's potential profitability. Unlike contracted services, the installation is neither guaranteeing revenue nor paying a fee for services to the P/PV operator. Instead, the installation is saying, in essence, "We will give you the right to come onto our base and own and operate an MWR facility/activity at your own risk of profit or loss. What quantity and quality of facilities and what quality of service are you willing to give us, and what are you willing to pay us (i.e., the NAFI) in return for this right?" To the private operator, this is really no different than an offer of similar rights to do business on a piece of private property. The private operator analyzes the military
P/PV opportunity from the same perspective, using the same economic feasibility measurement methodologies, as he analyzes the private-sector opportunity.

We discussed Navy MWR P/PVs with representatives from a wide range of companies in each industry segment. We examined their pro forma income and expense statements for similar private-sector facilities and discussed their approaches to determining private-sector interest in Navy MWR P/PVs. Their approach, not surprisingly, is to analyze the military market at the installation; determine the capital investment required to bring the facilities up to a standard necessary to support the expected patronage over the life of the contract; and then to construct pro forma financial statements, including debt service, taxes, and return on investment, for the particular MWR business. The results of the pro forma analysis tell them whether the opportunity being presented by the Navy is feasible. If the opportunity appears potentially profitable, they make proposals, constraining their proposals and subsequent negotiations to their perceptions of the project's potential profitability.

Public/private ventures are viable options only when a particular project meets standards of economic feasibility imposed by the private sector, not by the Navy. As we discuss in Chapter 2, these private-sector standards differ from industry to industry. However, the following conditions must be met in all industry segments:

- The current and future market must be large enough to support the requested facilities and scope of services at profitable levels.

- The private operator must be given enough control over prices, policies, and products to serve the market as he deems appropriate, in keeping with good industry standards, in order to maintain unit and dollar sales at profitable levels.

- The contract period must be long enough to amortize the cost of the required capital investment in the facilities.

We found that some of our test sites failed to meet these standards. In those cases, no matter how much the installation wants a P/PV for one of its particular MWR activities and no matter what the installation is willing to do to attract a private operator, the chances of implementing a successful P/PV project are remote, for the projects are not economically feasible.
Control of MWR Activities

We also found situations in which P/PVs were economically feasible only if the installations were willing to change their operational procedures or relinquish more control over the operation. The P/PV golf courses at NAS Lemoore and NAS Cecil Field are cases in point. Security and other operations at those bases and the physical location of the P/PVs enabled the CO to agree to operational and control changes that made a successful P/PV option possible. Not all installations, however, have MWR P/PV candidates that are economically and operationally viable.

Installation commanding officers were most concerned about relinquishing control over price. In the Navy, COs have traditionally set prices for all MWR activities, usually with the assistance and recommendations of local MWR advisory councils. At each of the sites we visited, the CO stressed "the need to keep the price to the sailor at a reasonable level." At each of those sites, though, we found that prices for MWR activities were rising - sometimes by as much as 50 percent because of APF subsidy cutbacks. The Congress has directed the Services to set MWR prices at about 75 percent of the local market. Prices for MWR activities are generally rising toward the policy of being "no more than 75 percent of the private-sector market price." We believe that these price rises will continue, whether MWR activities remain as in-house operations or are run by private companies because they now must be operated as unsubsidized businesses.

A second area of control is the patron market. All of the COs at the test sites stated that the MWR activities existed for the primary benefit of active duty service persons. While that is true, the economic reality is that some MWR activities depend on other market segments for a significant portion of their revenues. Those other market segments include dependents, retirees, DoD civilians, contractors, and guests. In some situations, the CO must agree to an expansion of the defined patron market if the P/PV is to be economically feasible.

Expansion of the defined patron market has advantages and disadvantages. Some active duty personnel may perceive the increased use by other-than-active-duty patrons as a reduction in quality of service and therefore a disadvantage. On the other hand, the expanded market may be the only way to attract a private operator to invest in the capital improvements that the active duty personnel desire and could not have otherwise. In fact, given the reduced levels of construction grant funds,
P/PVs may be the best hope that an installation has of getting the MWR facilities and services it wants, albeit with an expanded patron market base.

Commanding officers are understandably reluctant to expand the patron market bases. Such expansion is politically sensitive not only to the active duty personnel but also to the residents and businessmen in the community outside the gate. At our test sites, we found the entire range of expanded patron market base issues. At one extreme, the proposed P/PVs needed no increase in the patron market; in the middle were situations in which the patron market needed to be expanded to all DoD civilians or to the general public on a carefully restricted basis; and at the other extreme was the situation in which the patron market had to be expanded without restriction to the general public. The need to open a particular MWR function at an installation to all DoD civilians or to the public to attract a P/PV is driven by market forces.

In considering expanding the patron market, the installation must take three critical elements into account: two of those elements relate to market conditions and one to installation operations. One market-related element that must be considered is the degree of patron market expansion necessary to make the project a success. That degree can be determined, for example, by consultation between the installation and the private sector (e.g., at an industry forum or by market studies). The second market-related element is the market situation for the same service outside the gate. For example, if the private market outside the gate for bowling has excess capacity, then opening a military bowling center to the public would not be feasible. However, if the area has no private golf course and neither the civilian nor the military populations alone will support a golf course, a P/PV military golf course open to the public in some fashion may be reasonable. The third element is the operational feasibility to the installation of expanding the patron market. For example, if the military golf course is on the installation's fence line or is, or can be, outside the gate, security and traffic issues are not as important. However, if the golf course is in the interior of a nuclear submarine base and close to the submarine piers, security becomes a greater issue.

**PnPV Project Packaging**

Small installations — and larger installations in the same geographic area but with small MWR activities — may be able to combine projects in a package to be
successful. We found that packaging could have a dramatic impact on the feasibility of a P/PV project. Packaging involves combining in the same P/PV project two or more MWR activities at one or more installations or one type of MWR activity at two or more installations. For example, while the private sector may not find the club operation at one installation to be economically feasible as a P/PV, it might find a package project that includes the same installation’s club operations combined with the club operations at additional sites to be economically attractive. Similarly, several small MWR operations at a relatively small installation may not be economically attractive as stand-alone P/PVs; however, two or more of them (e.g., a marina and a club system) packaged together as one project may attract private-sector interest.

The reasons for the attractiveness of P/PV packaging vary from one MWR function to another, but all are market-driven. For example, the various sectors of the retail food and beverage industry are highly competitive and have evolved into regional and national structures. A single company shares regional purchasing, marketing, and management, thereby achieving economies of scale in those areas of its business. Private companies with whom we discussed the possibility of club P/PVs were most interested in packaging since it would fit the natural structure and market of the existing industry.

**MWR Industries are MARKedly Different**

Our final finding on the use of P/PVs for operating MWR activities is that each industry – bowling, golf, marinas, etc. – is different. The bowling industry, for example, is mature, requires long-term contracts to amortize the relatively large capital investments in facilities, and has well-known industry standards and market statistics. At the other extreme, the marina industry has no national or even regional chair operators and has relatively few industry standards or statistics. A single approach to all P/PVs will not likely be successful.

**Conclusions**

The opportunities offered by P/PVs present new challenges and require new ways of thinking. P/PVs can play an important role by providing the external sources of the investment capital needed for improving and expanding MWR facilities. They are feasible for many, but not all, types of MWR activities, and at many, but again not all, sites, and they can help provide an additional needed source of investment.
capital and management expertise. Since P/PVs cannot be successful in all MWR situations, attracting private contractors to take the entrepreneurial risks involved in investment and operations for relatively long periods of time will sometimes be difficult. The success of a P/PV hinges primarily on five factors: market, pricing, contractor control, size of capital investment, and length of contract term. In some instances, the patron market may have to be expanded, prices may have to be allowed to approach market levels, contract terms may need to be relatively long, or these and other factors must be combined.

The Navy will have to attract the private sector to participate by offering economically viable sites and sometimes multiple sites and/or activities as P/PV candidates. Individual installations are still wary of P/PVs and have not yet felt the full financial burden of the loss of APF. Several successful P/PV MWR contracts, continued in-house operating losses, and lack of grant funds for capital improvements will play key roles in convincing installations of the benefits of P/PVs.

Once convinced of the benefits of attempting a P/PV, local commands may still have difficulty in executing successful contracts until they are comfortable with having little arbitrary control over the contractor. Installations will want assurance that giving up arbitrary control (e.g., over prices and operating policies) will attract good contractors and lead to a higher quality and quantity of service. The P/PV contractor's best interests are served by meeting the desires of the market by providing quality products and services at a competitive price. The contractor who fails to do so will lose customers and lose money since the Navy makes no profit guarantee (unlike contracted services for which the Navy guarantees payment for the services). One of the best controls that the Navy can exercise over a P/PV contractor is to let the authorized users vote with their pocketbooks on their perceived value of the contractor's goods and services. Private business understands this control mechanism very well.

Reasonable safeguards can be built into P/PV contracts to make up for some of the loss of arbitrary control. For example, some MWR activities lend themselves to the establishment of a fixed relationship between prices on the inside and those on the outside. Care must be taken to set this relationship at a level that is economically feasible for the contractor and to provide an objective yardstick and process for establishing initial and future price limits. If properly established, this
relative-to-market-price mechanism can provide the local command with adequate control over the prices of goods and services offered by P/PV contractors.

Another safeguard is the inclusion of an operations and maintenance plan in the contract that requires the contractor to meet minimum standards. The minimum standards can be those that are typical of private industry unless safety or other extenuating circumstances require some differences. The oiling of bowling lanes on a schedule and in a manner consistent with accepted industry standards is a case in point. (The RFP might even require offerors to detail the oiling plan in their proposals.) Other safeguards are possible as well.

The main conclusion with respect to controls, therefore, is that installations need to be assured that relinquishing arbitrary controls for setting baseline prices and operations in the concession agreement will be worth the tradeoff; the tradeoff results being that the private contractors, who will have a substantial cash investment in P/PV capital improvements, will do what they do best - attract customers by offering quality facilities and services at a competitive price.

We studied the operations of each industry and developed models of their expected financial operations in P/PV roles. That approach allowed us to determine the feasibility of particular sites for certain MWR P/PVs based on the factors that determine project success. It also allowed us to draft solicitation packages and contract documents that would be acceptable to both the Navy and the private sector. Learning, analyzing, and understanding the financial and management operations of each relevant private industry segment was essential to the identification of those P/PV options that would have the highest probability of meeting the Navy's goals at each site. Market studies, arms-length consultations with the private sector at industry forums, and other information-gathering approaches can be useful tools in this process.

Since each industry is different, the P/PV options for each industry will be different. Feasibility studies are the key to defining the best options for a project. In some cases, the options will be straightforward and relatively limited (e.g., bowling P/PVs). In those cases, P/PV feasibility studies also will be straightforward and relatively limited. In other cases, the options will be more complex (e.g., golf) and the associated P/PV feasibility studies will also be more complex. In all cases, some kind of feasibility study is necessary to identify the P/PV options that are most likely to
achieve the installation’s goals and at the same time be attractive to the private sector. The feasibility studies also provide a comparison to the continuance of in-house capitalization and operation. Although the feasibility studies do not always have to be long, involved, or externally conducted, they do have to be conducted and conducted well. In-house feasibility studies for the NAFI alternatives at our test sites were inadequate in determining market demand and supply factors.

The concept of packaging different MWR functions at an installation or the same MWR function at multiple installations must be kept in mind when performing P/PV feasibility studies. The management and financial economies of scale of packaging sometimes turn P/PV situations that have little chance of success into ones that can succeed. The Navy will face internal coordination issues between installations and major claimants when attempting P/PVs.

Recommendations

We offer the following recommendations for Navy action with respect to P/PVs.

- The Navy should remain flexible in its approach to designing price and operations controls for P/PVs so that it can attract the private sector and at the same time meet its facilities and operations goals since the success or failure of each P/PV project will be dominated by the circumstances of the market in each individual case. The primary areas in which the Navy should be flexible are the control of price and patron markets and the length of P/PV contract terms. Neither the Navy nor the private operator should seek to control prices absolutely; rather, prices should be determined objectively in relationship to outside market prices. However, if feasibility studies or discussions with industry indicate that other pricing strategies are necessary to induce the private sector to take the entrepreneurial risks, the Navy should be flexible enough to consider those changes. The same recommendation holds for patron market definition and other operational factors directly affecting P/PV project feasibility and viability.

- As part of the planning process before issuing RFPs for P/PV projects, the Navy should perform feasibility studies to understand the issues and the market. These feasibility studies should include at least recommendations on patron market and price, operations, environmental factors (if applicable), and community reaction (if applicable). Feasibility studies are included as appendices to this report, and they should be used as guides. Installations’ feasibility studies may be prepared internally or externally, depending on the type and complexity of the project under consideration. As we discuss in the appendices, feasibility studies for bowling can be performed in-house in most cases, while those for marinas, golf courses, and
clubs are likely to need external assistance in identifying the most appropriate options.

- **Installations should conduct industry forums as part of the planning process if needed for information purposes.** Sometimes a market study does not provide enough information about important factors to attract good industry proposals. Furthermore, the industry may not be used to dealing with the Navy and may need to have issues clarified before even considering an RFP response. In these situations the installation should hold an industry forum in which the NAFI presents its P/PV concession concept and solicits comments and discussion from the industry. The industry forum should be held before an RFP is released so that the NAFI can construct an RFP that has the best chance of attracting good proposals.

- **Installations should use built-in performance incentives to assure themselves of adequate controls over prices and operations.** Local installations should use built-in performance incentives, rather than arbitrary restrictions, to control contractor prices and operations. For example, setting the baseline relationship between MWR price and local market price of comparable facilities and services allows contractors to profitably and competitively set prices within an objective and reasonable range. It also assures local installations that sailors will be charged a fair price throughout the life of the concession agreement.

- **The Navy should take advantage of the financial and management economies of scale by packaging P/PV projects whenever possible and necessary to ensure their success.** The Navy should work to remove the internal barriers to packaging across installations and major claimants as part of its overall MWR strategy and business plan. P/PV packaging projects that make economic sense should be attempted. Marinas and golf courses with clubs are good candidates at individual installations. Multiple clubs, golf courses, and bowling centers are good candidates among installations in a geographic region.

**STRUCTURING THE SOLICITATION**

**Findings and Conclusions**

After discussing Navy P/PVs with many Government entities including municipalities, county governments, the National Park Service, and the U.S. Army Corps of Engineers, we found that virtually all of their P/PV contracts were awarded on the basis of a negotiated procurement rather than sealed bidding in which the lowest bidder wins the contract. Under a negotiated type of procurement, the public entity can use source-selection procedures to weight the selection factors toward qualities it feels are more important, such as experience, rather than making cost the
sole determining factor. NAF activities are not bound by the FAR, which gives them greater flexibility in contracting procedures.

Source-selection procedures offer the highest probability of success in selecting an offeror and awarding a contract for MWR P/PVs. The source-selection procedure is a negotiated acquisition process that allows the NAFI to evaluate offers on factors other than price alone and to select the proposal that provides "the greatest value to the NAFI." The factors that will be considered in evaluating proposals are tailored to each acquisition. Evaluation factors that apply to an acquisition and the relative importance of those factors are within the broad discretion of NAFI officials. Evaluation factors that may apply to a particular P/PV acquisition are technical excellence, management capability, personnel qualifications, experience, past performance, schedule, and payment to the NAFI.

In general, P/PV contracts can take the form of lease agreements or concession agreements. Lease agreements require the Government to execute two separate contract actions: a landlease, executed by the cognizant NAVFAC engineering field division, which transfers interest in a parcel of Government land to a contractor, and a lease contract wherein the Government agrees to lease back capital improvements that are constructed by the contractor. A NAF MWR concession agreement does not require a landlease contract; in a concession contract NAFI assets (i.e., land, buildings, equipment, etc.) can be assigned to a contractor for the contract duration. Moreover, concession contracts enable the NAFI to receive contractor payments which become a part of the local NAFI's MWR fund. The NAFI is unable to do this with leasehold agreements since any contractor payment would go directly to the U.S. Treasury.

Typical military construction (MILCON) solicitations are restrictive and overspecified relative to the requirement for P/PV RFPs. MILCON solicitations contain Davis-Bacon Act and Buy American Act restrictions as well as voluminous quantities of Federal, military, and standardized specifications. NAVFAC's legal counsel has determined that the Davis-Bacon, Buy American, and Service Contract Acts may not apply to P/PVs, and the private sector, which will own the capital improvements, can produce quality facilities without many of the detailed specifications used in MILCON projects. In lieu of using detailed specifications,
performance standards for operations can be developed describing what is expected of the contractor without detailing how it is to be accomplished.

Developers need the RFP to describe the full extent of the development opportunity. They are typically interested in such items as market studies (i.e., supply and demand figures), market restrictions, pricing restrictions, site plans, utility plans, and geotechnical studies (i.e., soil borings). They also need a detailed inventory of what assets, if any, will be assigned to the contractor. (Note: Any land assigned to a contractor will be subject to any existing and/or future easements for electric power transmission lines, telephone lines, water, gas, gasoline, oil or sewer pipeline, or other facilities). Minimum capital improvement requirements along with the associated development schedule also need to be included in the RFP.

Contractors will require a great deal of basic information such as utility and facility maintenance costs. This is usually provided in the RFP or in response to questions at a preproposal conference. Most MWR facility managers have difficulty in providing a history of these costs. Utility costs may have been kept artificially low and all facilities maintenance may not have been accounted for. Moreover, the contractors may need the prices of off-base utilities if they are an option. Installation managers can greatly facilitate the solicitation process by ensuring that this information is credible and readily available.

We found that developers will be reluctant to submit proposals for P/PV contracts if they are not protected from possible base closures or realignments. To preclude this situation, a reimbursement guarantee can be included in the contract. Such a clause should state that if the total authorized military strength of the base is reduced by 50 percent or more from that strength at the time of contract award and the reduction lasts more than 90 consecutive days, the NAFI guarantees to reimburse the contractor for capital improvements at their depreciated book value. The clause would also mandate that the contractor maintain records of the depreciated book value of capital assets in accordance with Generally Accepted Accounting Principles for discounting such assets.

Developers normally expect to provide their own physical security for their operations and facilities. Security includes the safekeeping of all structures, facilities, equipment, all items for sale, and all records used in the management and operation of the P/PV. Base security and fire protection should be provided by the
activity in accordance with the installation's rules and regulations; this will preclude
the contractor from having to duplicate services the installation is already providing.
However, the contractor should be required to conform to Navy Life Safety
Requirements at all times during the contract term.

The NAFI is unable to take ownership of capital improvements during the P/PV
contract term. Therefore, title to contractor improvements will remain with the
contractor for the term of the contract. Contractor interests will not include any
interest in the assigned land upon which the improvements are located.

Upon expiration of the P/PV contract, the Navy may, at its option, obtain title to
contractor improvements for a total sum of $1.00 or the depreciated book value of
improvements, whichever is greater. However, the contractor should have the right
to remove all signs and trade equipment.

The Navy does not intend that any NAF employees lose their jobs as a result of
a P/PV contract. Therefore, the contractor should be required to give NAF employees
the right of first refusal for employment openings under the contract in positions for
which they are qualified. Further, the contractor should not be allowed to arbitrarily
dismiss these employees for a period of 90 calendar days.

The contract term for P/PVs should be as long as possible except with clubs.
Long contract terms enable developers to obtain long-term financing, which lowers
their annual debt service, thereby making P/PVs more feasible. The length of the
contract term would depend on the amount of required capital improvements.

Recommendations

Insofar as the structure of the P/PV solicitation is concerned, we make the
following recommendations.

- *The Navy should use source-selection procedures in awarding P/PV
contracts.* The criteria for source selection should encompass four primary
areas:
  - Design and construction plans
  - Experience and performance history
Operations and maintenance plans

Amount and timing of concession fee payments to the NAFI.

- The Navy should use a concession agreement form of contract for P/PVs. Any Government assets (i.e., land, equipment, etc.) to be used in performance of the contract should be assigned to the contractor for the contract duration.

- For operations, the Navy should use performance standards that describe what is expected of the contractor without detailing how it is to be accomplished and without using detailed specifications.

- The Navy should provide offerors with details describing the full extent of the development opportunity. The Navy should include the following information in the RFP, either as attachments or appendices:
  
  - Site plans
  - Utility plans
  - Geotechnical studies
  - Marketing data such as authorized users' historic participation and revenues
  - Inventory of assets
  - Utility costs.

- The Navy should specify minimum capital improvement requirements along with the associated development schedule. However, the ultimate size of the facilities should be a bid item in the RFP.

- The Navy should include a reimbursement guarantee clause in the contract to protect the contractor from possible base closures or realignment.

- The Navy should include a disposition of improvements clause in the contract that gives the Navy the option to obtain title to contractor improvements upon expiration of the P/PV contract.

- The Navy should include a right of first refusal clause in the contract that requires the contractor to give current NAFI employees a right of first refusal on jobs, with no arbitrary dismissal for 90 calendar days.

- The Navy should make the contract term long enough for the contractor to amortize the capital improvements required by the RFP.
INTEGRATED STRATEGY FOR MWR FACILITIES AND SERVICES

Findings and Conclusions

The Navy must view its revenue-generating MWR functions much the same way that a private company would view them. The facilities are assets to be managed over time, and the quality and quantity of services must be primarily market-driven rather than command-driven whether the market is internal or a mixture of internal and external.

However, P/PVs do not spring up and operate in a vacuum. They are part of a larger MWR business, a big business that has a whole set of local and Navy-wide dynamics. Therefore, the feasibility of potential MWR P/PV projects and the long-term successful operation of actual MWR P/PV projects need an integrated Navy MWR perspective — a perspective that does not now exist.

The NMPC has a construction grant program that operates by allowing installations to submit requests for MWR construction grants through their major claimants to NMPC. The submissions include economic projections for the facility that may or may not be supported by a feasibility study. Annually, the major claimants and numerous installation COs meet to award available construction grant dollars for some of the submitted proposals. Currently, the grant program has no funds for distribution because of the financial strain on NAF by the cutback of APF subsidies.

We found instances in which major claimants and their installations preferred to pursue new MWR construction projects with a central NAF grant rather than pursue P/PV projects that, in our estimation, would have been more beneficial to the installation. In those instances, our estimates projected either better facilities, more facilities, higher local NAFI profits, or combinations of all three compared with NAF grant construction and continued in-house operation. We believe that one reason for failure to pursue P/PV projects is the "absolute control" issue. Another reason is that the installations have not yet felt the full economic effect of zero-APF subsidies.

The central NAF grant for these projects had been approved before the Congressional cutbacks in NAF APF subsidies. If funds for these projects had been held pending successful P/PV attempts, those funds could have been used more effectively for grants to installations that cannot support an economically feasible
P/PV and that will not otherwise get new MWR facilities in the zero-APF environment. (In one instance, however, an activity put its grant project on hold pending an attempt at a successful P/PV alternative.)

The NMPC also has an MWR construction loan program called the Return on Investment (ROI) program. As with the NMPC construction grant program, under the ROI program, installations submit requests for MWR construction loans through their major claimants to NMPC. The submissions must also include economic projections that may or may not be supported by a feasibility study. A review board within NMPC makes decisions on loan requests on a first-come, first-served basis. The loans, if granted, are for periods of 5 to 15 years at no interest. In FY88 and FY89, the ROI program loaned $117 million, and no more money is available in the immediate future because of the financial squeeze on the MWR fund.

The funds for both the construction grant program and the ROI loan program come from interest earnings on MWR temporary excess balances in its central bank account. That money is generated by revenues from sailors using local MWR activities and from sources such as the NEX profit distributions to NMPC from NEX revenues (which also come from sailors' purchases).

Although the initial funds for construction of MWR facilities under P/PVs come from concessionaires, revenues generated from sailors' purchases will pay for the amortization of the debt. Profits from P/PVs that are shared back with the local NAFI will eventually find their way into the NMPC central bank account.

Given the common objectives and the interrelationship of the facilities, services, revenues, and profits of all three programs — construction grants, ROI loans, and P/PVs — the Navy has no integrated strategy for decisions on the use of one approach rather than another to meet MWR goals. It has no answers to such questions as, "When is a P/PV the desired approach over a grant or loan? Should grants only go to installations that cannot support a P/PV or ROI loan? Should there be similar reliable feasibility studies performed in all three types of approaches?"

Compounding these integration issues is the difficulty that NMPC has in reliably knowing how many MWR facilities will be needed in the foreseeable future, what type will be needed, and how much they will cost. For example, although
construction grant requests are supposed to be identified through a multiyear-needs assessment process, project requests often show up without prior notice.

The lack of an integrated financial and construction assessment strategy among the three approaches may lead to less than optimal allocations of funds for MWR facilities, resulting in fewer or lesser quality MWR facilities and services for sailors.

Recommendations

Since the feasibility of MWR P/PV projects and their successful operation depends on an integrated Navy MWR perspective, we make the following recommendations.

- **The Navy should revise its approach to MWR to incorporate an integrated business management strategy that mimics private industry as much as possible and should integrate P/PVs into a long-term business plan for financing and managing its revenue-generating assets.** The Navy needs a new vision for MWR activities and the role of P/PVs in providing those activities. It must change the way it views the capital financing, operation, and maintenance of MWR activities. More and more, MWR activities should be seen as the large public/private businesses that they really are. The Navy MWR business has considerable revenue-generating assets that must be well-managed, well-financed, and well-maintained in an environment bereft of subsidies. P/PVs can play an important role in MWR activities in management, maintenance, and financing — especially in the latter. However, the role of P/PVs should be integrated into a plan that includes decisions on the best uses of construction grants and loans.

An MWR business plan that effectively integrates P/PVs into an overall financial strategy will help to solve many of the Navy's problems in financing new facilities and upgrading, repairing, and maintaining old ones. This strategy and integration may require more centralized decision making and control in the planning and financing (not the operation) of Navy MWR activities. Financial planning and decision making, including the development of P/PV strategies, should take a distinctively Navy point of view rather than a local-installation point of view. Such centralization may extend to policy decisions as to which specific MWR functions at which specific installations should be financed and operated as P/PVs and which should remain in-house.

- **The Navy should take immediate inventory of its entire stock of MWR revenue-generating assets, including information on the physical condition of those assets and the major repairs and improvements projected to take place over the next 5 years.** The Navy should use the asset inventory information to prepare its MWR business plan showing how it is going to finance major
facility repairs and improvements over the next 5 years. Logically, P/PVs should be part of the plan. This coordinated approach to MWR financing and operation will allow P/PVs to provide maximum benefit to the Navy. Once a new vision and business plan have been developed, it should be disseminated throughout the entire Navy. It should deal with the realities of MWR activities as one big public/private business rather than dozens of mutually exclusive businesses at mutually exclusive installations, and it should describe how P/PVs fit into the overall business plan.

- The Navy should offer the private sector some of its most economically profitable MWR activities for P/PVs to preserve in-house capital funds for economically marginal, but necessary, MWR activities. P/PVs will not be successful if installations try to use them to contract out the losing MWR activities while trying to keep the profitable ones in-house. The private sector will not be interested in such arrangements. The Navy, especially local installations, should turn some of its most profitable MWR activities into P/PVs since they will provide external sources of funding for improvements and additions to facilities and conserve internal funds (i.e., construction grants and ROI loans) for projects that cannot be self-supporting as P/PVs.
## GLOSSARY

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A&amp;E</td>
<td>architect and engineering</td>
</tr>
<tr>
<td>AMC</td>
<td>American Multi Cinema, Inc.</td>
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<tr>
<td>APF</td>
<td>appropriated funds</td>
</tr>
<tr>
<td>BPAA</td>
<td>Bowling Proprietor's Association of America</td>
</tr>
<tr>
<td>CO</td>
<td>commanding officer</td>
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<tr>
<td>CPO</td>
<td>Chief Petty Officer</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
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<tr>
<td>EIS</td>
<td>environmental impact statement</td>
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<tr>
<td>FAR</td>
<td>Federal Acquisition Regulation</td>
</tr>
<tr>
<td>FONSI</td>
<td>finding of no significant impact</td>
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<tr>
<td>HVAC</td>
<td>heating, ventilating, and air conditioning</td>
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<tr>
<td>HAC</td>
<td>House Appropriations Committee</td>
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<tr>
<td>MILCON</td>
<td>military construction</td>
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<tr>
<td>MWR</td>
<td>morale, welfare, and recreation</td>
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<tr>
<td>NAF</td>
<td>nonappropriated fund</td>
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<tr>
<td>NAFI</td>
<td>NAF instrumentality</td>
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<tr>
<td>NAS</td>
<td>Naval Air Station</td>
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<tr>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
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<tr>
<td>NAVBASE</td>
<td>Naval Base</td>
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<tr>
<td>NAVFAC</td>
<td>Naval Facilities Engineering Command</td>
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<tr>
<td>NAVRESSO</td>
<td>Navy Resale and Services Support Office</td>
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<tr>
<td>NAVSTA</td>
<td>Naval Station</td>
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<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NEX</td>
<td>Navy Exchange</td>
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<td>NMPC</td>
<td>Naval Military Personnel Command</td>
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<td>NMPS</td>
<td>Navy Motion Picture Service</td>
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<tr>
<td>NTC</td>
<td>Naval Training Center</td>
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<tr>
<td>P/PV</td>
<td>public/private venture</td>
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<tr>
<td>RFP</td>
<td>request for proposals</td>
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<tr>
<td>ROI</td>
<td>return on investment</td>
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