

## CHAPTER VII

### SHORE FACILITIES PLANNING

Planning is an essential ingredient in all effective organizations and this is no less true of a military organization. Within the Naval Facilities Engineering Command's Shore Facilities Planning Program, substantive planning for the Navy's shore establishment, or planning aimed at fulfilling the requirements necessary to accomplish an activity's assigned mission or task, was focalized. While this may appear on the surface to be a static function, in reality it was quite dynamic. Just as military objectives, policies, and requirements changed, so did the plans conceived on the basis of these factors.

More specifically, the Shore Facilities Planning Program involved the interrelated processes by which the Navy's shore facility needs were identified and eventually combined into an annual construction program designed to meet those needs. Between the initial identification stage and the programming stage, statements of gross needs were transformed into executable projects by means of planning techniques. Data was also generated which permitted knowledgeable choices among the many projects competing for scarce resources during the programming stage. Beginning in 1960, these planning and programming stages were formalized in

the Shore Facilities Planning and Programming System. As an adjunct to this formal system, the facilities planning effort also included such tasks as master planning of shore activities and complexes, preparation of General Development Maps and other maps, advanced base planning for contingencies, special planning studies with regional, functional, or system interrelationships, and facility siting.<sup>1</sup>

#### SHORE FACILITIES PLANNING SYSTEM

Because facilities planning drew heavily upon civil engineering expertise, the Naval Facilities Engineering Command had long participated extensively in the planning stages of the system and its adjuncts. In 1967, the Command received greatly expanded responsibilities in the programming and budgetary phase as well. Overall, the years 1965 through 1974 constituted an extremely creative period for the Navy in the whole field of facilities planning and programming. The Naval Facilities Engineering Command took a strong lead in this development emerging at the end of the period with greatly increased responsibilities and capabilities.

---

<sup>1</sup>For an overview of the Navy's approach to facilities planning, see Systems and Procedures Guide for the Shore Facilities Planning and Programming System, NAVFAC P-387; OPNAV Instruction 11010.1E of 7 Nov 1967; CDR L. R. Larson and LCDR L. E. Stiffler, "New Shore Facilities Planning System," The Navy Civil Engineer (October 1960), pp. 24-27.

## Revising the System<sup>2</sup>

In 1962 the Dillon Study of Navy management noted weaknesses in the two-year old Shore Facilities Planning and Programming System while conceding the basic soundness of the system itself.<sup>3</sup> By the mid-1960s this view had become widespread within the Navy and a movement for revision of the system, spearheaded by the Naval Facilities Engineering Command, took shape.<sup>4</sup>

Even before his formal installation as Chief in late 1965, Rear Admiral Husband began discussions within the Command on methods of improving the system.<sup>5</sup> Shortly thereafter he wrote to the Chief of Naval Material concerning these needed improvements.<sup>6</sup> Then, in 1966, a study effort within the Command, designed to seek out means of strengthening its support to the Chief of Naval Material, concentrated on facilities planning as the area most in need of improvement.<sup>7</sup>

---

<sup>2</sup>Although a separate chapter within this history is devoted to military construction programming, the process is mentioned occasionally here because of the intimate relationship between planning and programming. Their parallel development also makes this mention a matter of necessity.

<sup>3</sup>Facilities Management Study, Study 6 of Review of Management of the Department of the Navy, Vol. II (26 Oct 1962), pp. 17-27. Hereafter cited as Dillon Study.

<sup>4</sup>CAPT C. Bittenbring, "Shore Facilities Planning Organization and Responsibilities," Shore Facilities Planning and Programming Conference Report (Oct 1968), pp. 1-2. Hereafter cited as Conference Report.

<sup>5</sup>Memo from RADM A. C. Husband to Code 20 of 19 Oct 1965.

<sup>6</sup>RADM Husband mentioned this initiative in his memo for Chief of Naval Material of 7 Mar 1967.

<sup>7</sup>Remarks of Mr. L. E. Dowling, Jr., NAVFAC Shore Facilities Planning, Jan 1969. Record Group 2, NAVFAC Archives, CBC, Port Hueneme.

The resultant study report of July 1966 analyzed weaknesses in the Shore Facilities Planning and Programming System and suggested reforms.<sup>8</sup>

Two divergent but complementary lines of development stemmed from this report. On the one hand, it provided the basis for briefings to higher authority on ways and means of improving the Navy's handling of facilities planning and programming.<sup>9</sup> In doing so, it converged with other studies concurrently being conducted within the Navy--for example, on the organization of the Office of the Chief of Naval Operations--which led to an overall revision of the Shore Facilities Planning and Programming System more than a year later.<sup>10</sup> On the other hand, the report pointed out that the Command could take steps at once, within its existing mission, to improve its own contribution to facilities planning.<sup>11</sup> An implementation report, known as the Shockey Report, followed in September 1966, spelling out those steps in detail.<sup>12</sup>

---

<sup>8</sup>"Facilities Engineering Command Role in Facilities Planning and Programming," Report of the Study Group for Topic III-A (Jul 1966). Hereafter cited as Topic III-A Report.

<sup>9</sup>Dowling remarks. RADM Husband provided the field with a sketch of these developments in his letter of 19 Jul 1967.

<sup>10</sup>Conference Report, p. 1.

<sup>11</sup>Dowling remarks; Topic III-A Report, p. 9.

<sup>12</sup>"Implementation Plan for Strengthening the NAVFAC Capability in Shore Facilities Planning and Programming," Study Topic III-A Report (Sep 1966). Hereafter cited as Shockey Report.

Since analysis must precede constructive action, identification of problem areas in the system underlay both its ultimate, overall revision by the Navy and the Command's immediate, unilateral expansion and intensification of its own facilities planning capability. The Command's study effort revealed a number of such problem areas and suggested the corrective action appropriate for each:

(1) Identification of requirements constituted the crucial first step in facilities planning, but the existing system provided no comprehensive, formalized and effective procedure for the identification of activity workload upon which requirements depended. The Command therefore recommended that higher authority establish such procedures and indeed predicated the accomplishment of substantial reform upon such action.<sup>13</sup>

(2) The existing system, elaborated during the period of bilinear Navy organization, provided for strong participation by management agencies and bureaus whereas operational commands entered the dialogue late and, it was felt, with insufficient weight. Particularly in view of the change to a unilinear Navy organization, command participation required strengthening.<sup>14</sup>

(3) The existing system failed to provide for strong civil engineering support at every stage of the planning and programming

---

<sup>13</sup>Topic III-A Report, pp. 3-4, 11-14; Shockey Report, p. 3; Conference Report, pp. 3-4.

<sup>14</sup>Conference Report, pp. 3-4. (This point was not addressed directly in the 1966 Study Reports.)

process. A need therefore existed for clarification, broadening and deepening of civil engineering support in the system.<sup>15</sup>

(4) The system lacked built-in methods and capabilities for achieving a balanced construction program over time; one which weighed current against future needs and each category of facility against all others to secure as nearly as possible an optimum investment with always limited resources. Relatedly, a better method of establishing priorities needed to be developed. The Command proposed to develop these methods and capabilities and to put them to work by acting as staff to the program sponsor (Chief of Naval Operations).<sup>16</sup>

(5) The system in general lacked strong centralized guidance, incorporating considerable fragmentation of effort and responsibility. The whole thrust of the reform movement was aimed at remedying this; the Naval Facilities Engineering Command, acting as staff to the program sponsor, would further advance the quest for coherence.<sup>17</sup>

Postponing to a subsequent section of the chapter the Command's unilateral moves to strengthen its own facilities planning posture, we can now briefly sketch the events leading to the issuance of OPNAV Instruction 11010.1E which revised the Shore Facilities

---

<sup>15</sup>Conference Report, pp. 3-4; Topic III-A Report, pp. 14-17; Memo from RADM A.C. Husband to CNM of 17 Mar 1967.

<sup>16</sup>Topic III-A Report, pp. 3-5, 8-9, 17-19; Conference Report, pp. 3-4; Memo from RADM A.C. Husband to CNM of 7 Mar 1967.

<sup>17</sup>Topic III-A Report, pp. 3-5, 8-9, 14-22.

Planning and Programming System basically along the lines suggested by the Naval Facilities Engineering Command.

As was previously mentioned, the Naval Facilities Engineering Command's study of the system converged with other Navy study efforts in 1966-1967 and, in particular, with a study aimed at streamlining the Office of the Chief of Naval Operations by transferring some of its functions to other offices in the Navy. As a result of the latter study, some military construction programming functions were transferred to the Naval Facilities Engineering Command in April 1967.<sup>18</sup> At the end of June, it was decided to transfer the remaining programming and budgeting functions to the Command effective on 1 August 1967.<sup>19</sup> This action, incidentally, gave the Command a great opportunity to supply some of the continuity and integration it had previously diagnosed as lacking in the planning-programming cycle.

At about the same time (July 1967) the Chief of Naval Operations established the new Logistics Support Requirements System, a major

---

<sup>18</sup>Memo from CNO to CNM (Op-44B/crs, Ser 26P44) of 27 Mar 1967; Memo from CNM to COMNAVFAC of 30 Mar 1967. The transferred functions included processing of urgent minor construction, emergency construction, and restoration of damaged facilities projects.

<sup>19</sup>Memo from CNO for the record (OP-002: ltr, OP-00 Memo 363-67) of 3 Jul 1967. This memo cited a proposal, as amended and approved by the Secretary of the Navy on 30 Jun 1967, to transfer programming and budgeting functions to NAVFAC while retaining in OPNAV "those functions relative to policy, requirements planning and decisions as to MILCON Program priorities...."

step toward the goal of supplying the workload data on which facility requirements and, hence, rational facilities planning depended.<sup>20</sup>

While these changes were still in the discussion and decision phase, the Naval Facilities Engineering Command received the go-ahead to prepare a revision of the Shore Facilities Planning and Programming System along the lines it had been suggesting.<sup>21</sup> Thus, OPNAV Instruction 11010.1E was born--but not without considerable effort.

It took from late spring until early November to write the directive.<sup>22</sup> It required a good deal of effort, only partially successful, to overcome resistance within the Navy to some of the projected changes. In particular, certain systems commands objected to their apparently lessened role in facilities planning and expressed concern as to what might become of the personnel and expertise they had developed in this area. Numerous draft revisions and the creation of an ad hoc coordinating committee contributed to resolution of the difficulties.<sup>23</sup>

---

<sup>20</sup>OPNAV Instruction 4000.72 of 24 Jul 1967.

<sup>21</sup>Ltr from COMNAVFAC to COMCBPAC of 19 Jul 1967; Dowling remarks.

<sup>22</sup>Dowling remarks.

<sup>23</sup>Ibid; The extent of the problem involved in reconciling divergent views is suggested by the Chief of Naval Material's subsequent reference to the "very painful and sometimes stormy background" of 11010.1E (Memo for the Record, MAT 0124:LJR of 22 Nov 1967). The flavor of systems command objections to the new approach can be sampled in the DCNO (AN) comments on the NAVFAC PCR in his memo to the Director of the Navy Department Program Information Center (OP-515/lec, Memo #116 of 22 Aug 1967). CNM ltr of 7 Jul 1967 to the Chief of Naval Personnel et al. announced formation of the ad hoc group. As early as 17 Feb 1967, in his letter to COMNAVFAC of that date, CNM had foreseen these difficulties and begun the dialogue intended to resolve them.



On paper the new directive went far toward correcting the weaknesses of the existing system. It linked planning and programming to the new Logistics Support Requirements System, and thus strengthened the crucial area of requirements definition.<sup>24</sup> Command participation in the planning dialogue was augmented in part by reorganizing the Military Construction Review Board to represent major claimants rather than the old class sponsors.<sup>25</sup> Civil engineering support to the system was reinforced notably by making Engineering Field Divisions jointly responsible with activities for preparation of Basic Facilities Requirements Lists and by giving the Naval Facilities Engineering Command lead responsibility for the performance of activity item planning, military installation planning, and civil engineering.<sup>26</sup> It was hoped that the expanded role of the Naval Facilities Engineering Command from the requirements phase through the budgeting phase would help to combat the existing fragmentation of effort and responsibility in the system. By enjoining the Command to perform "analysis of systems, types and categories of installations, and facilities," the directive sought to provide the kind of integrated and coherent approach to each year's annual construction program that previously had been absent.<sup>27</sup>

---

<sup>24</sup>OPNAV Instruction 11010.1E of 7 Nov 1967, 4.b.

<sup>25</sup>Ibid., 5.d.

<sup>26</sup>Ibid., 5.e., 6.c., 8.b.

<sup>27</sup>Ibid., 5.e.

Having traced the Command's participation in the overall movement to revise the Shore Facilities Planning and Programming System, we can now turn our attention to the actions it took unilaterally to improve its contribution to facilities planning and programming. For this development the Shockey Report served as "The Bible."<sup>28</sup>

Prior to 20 September 1966, the Command exercised its facilities planning functions through a single division under the Assistant Chief for Planning and Design.<sup>29</sup> On that date, it created a new organizational component, the facilities planning group, composed of three divisions and under its own Assistant Commander. The new organization, in addition to an augmented ability to carry out existing planning responsibilities, incorporated a division dedicated to the development of systems analysis and macro-planning techniques and capability.<sup>30</sup>

As the transfer of military construction programming functions impended, the Command set in motion a study to guide its response to the new responsibilities.<sup>31</sup> This led directly to the creation

---

<sup>28</sup>The phrase is Mr. L. E. Dowlings. Dowling remarks.

<sup>29</sup>Ibid.; In fiscal year 1966--the last under the old regime--the division had 1 officer and 34 civilians assigned with 5 additional civilians on the rolls of nearby CHESDIV. By fiscal year 1968, the personnel force had almost doubled with an on-board count of 5 officers and 62 civilians.

<sup>30</sup>NAVFAC Notice 5430 of 20 Sep 1966; NAVFAC Notice 5450 of 2 Dec 1966.

<sup>31</sup>Memo from COMNAVFAC to RADM L. C. Coxe of 19 Apr 1967 appointed the latter to chair the study effort. The group's recommendations are summarized in "Study Summaries, Topics 1-A thru XIII-A, 1966-1967," p. 11.

of a Deputy Commander billet to head up the organization's entire facilities planning and programming effort,<sup>32</sup> and a new group for military construction programming under an Assistant Commander.<sup>33</sup> For a time a third group at the Assistant Commander level was projected to perform the important liaison job necessary in the planning-programming effort, but this idea never came to fruition.

The Shockey Report, in addition to recommending general expansion and improvement in the facilities planning and programming area, attempted to define the additional resources needed to implement its proposals.<sup>34</sup> In July of 1967 the Command initiated the first of a series of "notoriously unsuccessful"<sup>35</sup> Program Change Request actions designed to secure the resources needed. The Program Change Request sought authority for additional personnel as well as funds for contract efforts to execute master plans, perform studies on the mechanization of the Shore Facilities Planning and Programming System, and conduct a broader study of the system as a whole.<sup>36</sup>

While the number of Command personnel engaged in planning and programming had grown substantially, the increase was less than

---

<sup>32</sup>NAVFAC Notice 5450 of 11 Jul 1967.

<sup>33</sup>NAVFAC Notice 5450 of 15 Aug 1967.

<sup>34</sup>Shockey Report, pp. 16-28.

<sup>35</sup>Dowling remarks.

<sup>36</sup>NAVFAC PCR of 31 Jul 1967.

proportional to the program's expanded responsibilities and added duties.<sup>37</sup> At the end of 1967, study groups undertook to identify resources which could be transferred from the Office of the Chief of Naval Operations and various systems commands to reflect changes of responsibility under 11010.1E.<sup>38</sup> Not much resulted from this effort, however, for the Chief of Naval Operations was already shorthanded in this area. Moreover, such potentially transferable facilities expertise as existed elsewhere was largely needed where it was to implement the new Logistics Support Requirements System.<sup>39</sup>

Getting authority to hire new people constituted only part of the problem. As the Shockey Report had foreseen, finding and hiring qualified personnel to fill authorized vacancies--especially in the sophisticated disciplines needed to develop a systems analysis and macro-planning capability--proved a major stumbling block in itself.<sup>40</sup>

Following in relatively rapid succession were additional organizational innovations which served to finetune planning procedure under

---

<sup>37</sup>Memo from DCNO (LOG) to VCNO of 28 Jun 1967. To take over programming functions of the FSA, two officer billets and three civilian ceiling points were transferred from the latter to NAVFAC at the turn of the year. Ltr from COMNAVFAC to CNO of 3 Jan 1968.

<sup>38</sup>In response to a CNM letter of 20 Dec 1967, COMNAVFAC prepared a schedule by which to conduct the investigations and appointed teams to participate in the effort. Ltrs from COMNAVFAC to CNM of 28 Dec 1967 and 4 Jan 1968.

<sup>39</sup>Shockey Report, p. 26.

<sup>40</sup>Dowling remarks.

the expanded Shore Facilities Planning Program. The consolidation of the Command's Engineering Field Divisions in 1969 created shore facilities planning groups in the field that were a mirror image of the new headquarters organization. This action also welded sparsely spread planning talent into more cohesive units at geographically balanced locations. An ancillary benefit was increased civilian personnel grade levels in the field.<sup>41</sup>

Later, in 1973, the Command's Real Estate and Shore Facilities Planning Programs were combined under a single Assistant Commander. Two factors appeared to contribute to this unusual departure from the previous organizational alignment. Firstly, the Shore Facilities Planning Program provided a great deal of input to the real property inventory maintained by the Real Estate Program. Since the information contained in the inventory was of vital interest to both programs, parallel systems were being maintained. The consolidation of both programs was intended to eliminate much of this duplicated effort. As a result, a central data base combined the real property inventory and the inventory portion of the planning system at the Command's Facilities Systems Office (FACSO) in Port Hueneme, California. At the same time, the shore facilities planning group was tasked with internal control of this combined inventory system.<sup>42</sup> Also weighted

---

<sup>41</sup>Interview with Mr. F. D. McGuire, NAVFAC Shore Facilities Planning, Code 20P, 28 Jul 1975.

<sup>42</sup>Interview with Mr. D. W. Walker, NAVFAC Shore Facilities Planning, Code 201A 29 Jul 1975.

in the decision was the immediate lack of a Civil Engineer Corps officer to fill the then empty billet of Assistant Commander for Real Estate. The 1973 consolidation neatly resolved this problem by allowing the assignment of one officer to head both programs.<sup>43</sup>

In summary, the most radical changes in the development of Command's Shore Facilities Planning Program occurred during the late 1960s. Succeeding years brought primarily internal adjustments aimed at clarifying and responsively furthering the goals of the Navy's planning system as newly defined.

#### Planning Activity and Accomplishment

It must be clear from the foregoing that participation in review and revision of the Shore Facilities Planning System and subsequent adjustment to these expanded duties represented a major segment of Command effort in the facilities planning field during the period 1965 through 1974. This, of course, did not preclude continuation of its day-to-day activities in facilities planning. These day-to-day activities, moreover, substantially increased and changed during the period as a result of the review and revision itself.

Throughout the period under consideration, the Command exercised important responsibilities in administering and implementing the planning phases of the Shore Facilities Planning and Programming System. Some of these responsibilities can be treated serially in

---

<sup>43</sup>McGuire interview.

the logical and chronological order in which they occur in the facilities planning system. Others which impact on the overall quality and efficiency of the system will be discussed subsequently.

#### Logistics Support Requirements

The Command played a decisive part in highlighting the need for and stimulating the decisions to create a formal workload defining procedure to serve as the basis for determining facilities requirements.<sup>44</sup> Actual creation of the system stemmed from higher authority, but the Naval Facilities Engineering Command contributed very heavily to the development of concepts and procedures.<sup>45</sup> The system, as promulgated in July 1967, included a schedule for implementation over a three year period.<sup>46</sup>

As might be expected from a major, new departure, the system in practice showed some imperfections. It elicited general assent in principle, but some complaints and resistance because of the volume and complexity of the required documentation and the difficulty of translating its workload data into actual facilities

---

<sup>44</sup>See above, p. . RADM Husband noted that the OPNAV study of the LSR System had probably stemmed from a CNM memorandum of 9 Aug 1966 to the VCNO. (Memo from COMNAVFAC to CNM of 7 Mar 1967) This CNM initiative had in turn clearly been a response to a previous NAVFAC briefing.

<sup>45</sup>Dowling remarks; "Report on Systems Analysis Division (201) Profile," Typescript (9 Jan 1969), p. 7.

<sup>46</sup>OPNAV Instruction 4000.72 of 24 Jul 1967.

requirements. The schedule of implementation, moreover, proved subject to slippage.<sup>47</sup>

While Logistic Support Requirement statements were eventually developed for each naval shore installation, it became apparent that the aforementioned difficulties could not be easily remedied. Furthermore, the essential task of updating these documents was deemed unwieldy and unrealistic in light of the comprehensive nature of their content. A follow-on problem was the lack of review at the Chief of Naval Operations level. All of the foregoing led to suspension of the preparation of Logistic Support Requirement updates in the 1970s.<sup>48</sup>

Nevertheless, the underlying purpose of Logistic Support Requirement statements, that of providing more accurate and objective loading data crucial to the development of a viable requirements list, could not be rejected. The Command stood steadfastly by its belief that a formal workload defining procedure was essential to the responsible conduct of the facilities planning system. At the end of the period under study the Command was seeking an alternative document which would eradicate the problems inherent in the Logistic

---

<sup>47</sup>Dowling remarks; Remarks of Mr. T. W. Friedman, NAVFAC Shore Facilities Planning, Jan 1969. Record Group 2, NAVFAC Archives, CBC, Port Hueneme; Conference Report, p. 2.

<sup>48</sup>Walker interview; This was effected by a CNO message in the 1970s.



Support Requirement statement while fulfilling its originally intended purpose.<sup>49</sup>

Tentatively suggested to replace Logistic Support Requirements was a Force Distribution Manual with supporting sub-system inputs. Roughly based on a document previously prepared for all naval air installations, it would list such loading data as aircraft, ships, and personnel assigned to all naval installations. Since this information was already available in mechanized files, the true effort would entail retrieving the data and then compiling it into a usable format. If approved, the end product would hopefully be an improved method of relating an activity's current and projected mission to its facilities requirements.<sup>50</sup>

#### Basic Facilities Requirements Lists

These documents translated Logistic Support Requirements into the facilities needed to meet those requirements. Formerly, management bureau/sponsors performed this important task.<sup>51</sup> Under OPNAV Instruction 11010.1E, however, each shore activity jointly with the cognizant Engineering Field Division was responsible for carrying

---

<sup>49</sup> Walker interview.

<sup>50</sup> Ibid.

<sup>51</sup> OPNAV Instruction 11010.1D of 30 Jul 1962, Section 2, 2.B. Incidentally, while OPNAV Instruction 11010.1F superceded 11010.1E in the 1970s, unlike 11010.1F, was not a radical departure from the previous system.

out this function. In addition, the Command, at the headquarters level, replaced the Chief of Naval Operations as the approving authority for the lists.<sup>52</sup> This change was aimed at strengthening and making the lists more realistic by centralizing and coordinating their preparation in the hands of a fulltime staff of professionals.<sup>53</sup>

Since success depended upon an accurate Basic Facilities Requirements List for each activity, this document was truly the cornerstone of a sound facilities planning system. Without an optimum Basic Facilities Requirements List, subsequent planning steps would be awry.<sup>54</sup> Hence, the Command constantly sought, within its expanded role, methods of further perfecting the preparation, update and review of Basic Facilities Requirements Lists.

#### Subsequent Planning Steps

Once facility needs had been defined on the Basic Facilities Requirements List, an engineering evaluation by Naval Facilities Engineering Command Field Divisions led to determination of actual new facility requirements or facility excesses (basically by

---

<sup>52</sup>OPNAV Instruction 11010.1E of Nov 1967, 6.2; NAVFAC Instruction 11010.44 of 26 Feb 1968, enclosure (1), 1.B.6.

<sup>53</sup>Such was the rationale for the change offered in Topic III-A Report.

<sup>54</sup>CDR V. M. Kimmick, CEC, USN, "Timing and Scope of Military Construction Projects," The Navy Civil Engineer (Jul-Aug 1965) pp. 33-35.

comparing needs with existing assets). Requirements, once identified, formed the basis for military construction programming. Projects from the identified requests were described in more detail on Department of Defense Form 1391 and were placed as actual line items in a program year package.<sup>55</sup>

As mentioned earlier, a desired outcome of facilities planning system revisions during the 1960s was a greater degree of control by major fleet commands, or so-called major claimants, over the military construction program. At the same time, resource restrictions naturally precluded the immediate construction of every facility requirement identified by the planning system. As a result, one responsibility of the major claimants became the establishment of project priorities within their specified monetary limitations. Major claimant priorities were henceforth given tremendous weight in the selection of projects to appear in the annual construction program.<sup>56</sup>

#### Mechanization of the System

The Command's study efforts in the mid-1960s had pointed to conversion of the planning system to Automatic Data Processing as an important task for the enlarged planning organization established

---

<sup>55</sup>NAVFAC Instruction 11010.44 of 26 Feb 1968, enclosures (1), C, D, E.

<sup>56</sup>Walker interview.

in September 1966.<sup>57</sup> Preliminary efforts in this direction were underway in 1967 culminating in high level approval for a contract effort to study mechanization of the system. Unfortunately, funding shortages retarded progress in this realm for some time.<sup>58</sup>

When the desired Automatic Data Processing System was finally initiated, effort first centered around placement of Basic Facilities Requirements Lists (BFRL) into mechanized files.<sup>59</sup> Portions of the BFRL were produced by the application of automated criteria. This automated system, known as NIFACS II, was used to check actual BFRLs or to produce limited theoretical BFRLs. Once approved, the actual BFRL was recorded in the mechanized file and became the basis for generating requests.

Later, when the Real Estate and Shore Facilities Planning Programs were combined, shore facility assets (as determined on OPNAV Form 1100/2) were added.<sup>60</sup> As mentioned previously, the real property inventory and shore facilities planning system data were joined in a central data base located at the Command's Facilities Systems Office (FACSO) in Port Hueneme, California.

---

<sup>57</sup>Topic III-A Report, pp. 17, 20; Shockey Report, pp. 21-22.

<sup>58</sup>Memo from NAVFAC O9P to Op-44B of 10 Dec 1968.

<sup>59</sup>Walker interview.

<sup>60</sup>Ibid.

By 1974, and not without considerable travail, a completely mechanized system had evolved. Its primary use was essentially data retrieval; the greatest cost-benefit was derived from the ability to generate almost any type of report in varying format.<sup>61</sup>

Future efforts were to be aimed at increasing the efficiency of the mechanized system. Plans for terminal applications were in motion that would enable Engineering Field Divisions to directly retrieve data from the system. Once this process was fully operational it was anticipated that the Command would attempt to provide its Engineering Field Divisions with the capability to make changes to the data base from their remote locations. Although not initially feasible because of hardware limitations, the ultimate goal was an input for a change followed by an instantaneous response.<sup>62</sup>

#### Planning Publications and Instructions

The Command, in its administrative role, engaged in the publication and revision of pertinent planning documents. Among these was the very comprehensive Systems and Procedures Guide for the Shore Facilities Planning and Programming System (NAVFAC P-387).<sup>63</sup>

---

<sup>61</sup>Walker interview.

<sup>62</sup>Interview with Mr. J. M. Cason, NAVFAC Shore Facilities Planning, Code 2011, 27 Jul 1975; The initial stages in planned terminal applications of the system were being successfully applied in 1975 and early 1976.

<sup>63</sup>Another manual, Procedures for Planning Naval Shore Facilities (NAVFAC P-340) was cancelled as obsolete in 1971. NAVFAC Instruction 11010.44 has since provided all of the relevant information.

Unlike its predecessors in the 11010.1 series, OPNAV Instruction 11010.1E did not spell out in detail procedures and responsibilities for the management of the Shore Facilities Planning and Programming System.<sup>64</sup> The void was filled by the aforementioned publication and issuance by the Command of NAVFAC Instruction 11010.44. The latter instruction was first issued in 1968 but subsequent changes, particularly the mechanization process, caused its revision.<sup>65</sup>

The Command also exercised its responsibility to update the planning factors vital for translating workload into precise facility needs. Facilities Planning Factors for Naval Shore Activities (NAVFAC P-80) provided these critical factors.

#### INSTALLATION PLANNING

The Command also carried out its responsibility for various other planning functions that were inseparably related but not a direct part of the formal shore facilities planning and programming system. Key among these were master planning, functional and regional planning, special studies and actions, preparation of general development maps, and site selection.

---

<sup>64</sup>Remarks of Mr. Friedman, NAVFAC Shore Facilities Planning. Record Group 2, NAVFAC Archives, CBC, Port Hueneme.

<sup>65</sup>"Revision to Shore Facilities Planning Manual," CEC Biweekly Report (19 Feb 1974).

### Master Planning

The years 1965-1974 witnessed a sharp intensification and broadening of the Command's approach to master planning. The master planning system begun by the Navy in 1951 had by 1960 fallen into a state of somnolence.<sup>66</sup> In 1965, however, the Command signaled the need to intensify effort in this area;<sup>67</sup> the succeeding years brought both increased production of master plans and important new innovations in this realm.

Master planning, according to an authoritative definition, constituted the scientific art of comprehensive planning performed for an activity or a complex of activities to assure the timely and orderly physical development of facilities required to support present and future military operations. This process blended considerations of the total environment including physical characteristics, operational necessities, human interests, and areas of mutual interest beyond station boundaries.<sup>68</sup>

A master plan, in graphic and narrative format, presented the existing composition of an activity or complex and proposed an optimum physical development to enable it to carry out its mission and handle planned operational workload.<sup>69</sup> In short, the master

---

<sup>66</sup>Topic III-A Report, p. 2.

<sup>67</sup>Dowling remarks.

<sup>68</sup>NAVFAC Instruction 11010.45 of 21 Jun 1968.

<sup>69</sup>Ibid.

plan provided a tool designed to achieve planned and orderly development for its subject. It aimed to avoid such problems, for example, as obsolescence of airfields because of lack of room for runway expansion to accommodate new types of aircraft or a forced dispersal of family housing units which might inhibit development of community facilities or circulation.<sup>70</sup> Only major activities rated a master plan with the General Development Map serving as a "mini-master plan" for smaller activities.<sup>71</sup>

Master planning was a key step in the overall planning scheme. Its purpose was to ensure that individual ongoing actions were developed and guided to a mutually compatible and overall optimal conclusion. Compatibility and optimality were defined in terms of present and future time frames and considered the parameters of function, flow, utilities, natural and man-made features, environment, and overall costs to the Navy. Master plans provided these data for very large and complex investment centers. Project efforts on the total environment were addressed in Environmental Impact Assessments and Environmental Impact Statements. All of the foregoing illustrates the essential nature of the master planning program to facilities planning as a whole.<sup>72</sup>

---

<sup>70</sup>I. Jack Gural, "Master Planning for Shore Station Development," BUDOCKS Technical Digest (Feb-Mar 1958), p. 18.

<sup>71</sup>McGuire interview; NAVFAC Instruction 11010.45.

<sup>72</sup>McGuire interview.



A number of important trends emerged in the master planning field during the period under consideration:

(1) The number of master plans undertaken and completed increased steadily throughout the period when compared to previous years of limited effort.<sup>73</sup>

(2) Master planning was linked more closely to the overall facilities planning system including the newly developed Logistic Support Requirements System. This made possible a more realistic incorporation of provisions for future workload in a given master plan.<sup>74</sup>

(3) In the 1960s there grew up a practice of high level Washington presentations of master plans before they reached the approval stage.<sup>75</sup> Interested parties could thus comment upon the plans while opportunity remained to incorporate useful suggestions. While overall knowledge of and interest in master planning in the Navy benefitted by this practice, it unfortunately waned in the 1970s.<sup>76</sup>

(4) A trend developed in the 1960s to make master plans more authoritative by securing for each formal approval of the Chief of

---

<sup>73</sup> "Master Planning Program-Accomplishments, Schedules and Resources," Brochure (Oct 1968); "Master Plan Program," Status Sheet; Interview with Mr. D. B. Pledger, NAVFAC Shore Facilities Planning, Code 202A, 28 Jul 1975.

<sup>74</sup> Ltr from CNO to COMNAVFAC (Op-441/D/11m. Ser 1999P44) of 12 Sep 1967.

<sup>75</sup> Dowling and McGuire remarks; NAVFAC Instruction 11010.45 of Jun 1968 initially incorporated these presentations as a formal step in the master planning process.

<sup>76</sup> McGuire interview.

Naval Operations. Procedures for obtaining such approval were promulgated in 1968.<sup>77</sup> The process was later streamlined when OPO4E, the Chief of Naval Operations approving authority, became a Civil Engineer Corps officer double-hatted as the Command's Deputy Commander for Planning. Thus, truly formal approval of master plans no longer existed.<sup>78</sup>

(5) The master planning effort became more systematized with the development in the late 1960s of a definite program covering major activities and complexes over a specified period of time. Fiscal stringency, however, later led to a lengthening out of the program.<sup>79</sup>

(6) A new method of preparing master plans was inaugurated. Known as the master planning team concept, several expert planners, specialized in different functional areas, were dedicated to the concurrent accomplishment of master plans.

Through 1966, much of the actual master planning effort was accomplished by contract. Beginning roughly in 1967, fiscal constraints led to a greater emphasis on preparation of plans within

---

<sup>77</sup> Remarks of Mr. Susswein, NAVFAC Shore Facilities Planning, Jan 1969. Record Group 2, NAVFAC Archives, CBC, Port Hueneme; Dowling and McGuire remarks; OPNAV Instruction 11010.24 of Feb 1968 established procedures for approval of master plans.

<sup>78</sup> McGuire interview.

<sup>79</sup> Susswein remarks.

and by the Command itself. The same fiscal considerations dictated an initial tendency to concentrate upon preliminary rather than complete master plans. Paradoxically enough, these imposed constraints actually brought with them advantages. By executing the plans itself, the Command enhanced the level of its technical planning skills and expertise. In-house preparation also proved more flexible than contract effort since the actual contract narrowly defined the scope of the project and later changes became difficult. The early restriction to preliminary as opposed to complete plans introduced still another element of flexibility by providing for immediate accomplishment of the actual engineering effort required. Later, the preliminary plans were smoothly developed into the activity's complete master plan. By the end of the period under study the entire master planning effort was executed in-house.<sup>80</sup>

Original plans at the time of increased emphasis on the master planning program had anticipated the preparation of a total of 135 plans. By 1974, however, this number had been increased to 145. Of this figure 74 plans had been completed and approved, 34 were under preparation, and 37 were scheduled for future accomplishment.<sup>81</sup>

Since master planning was a dynamic field, the Command concerned itself not only with the preparation of new plans but with the update

---

<sup>80</sup>Susswein and McGuire remarks; Pledger interview.

<sup>81</sup>Pledger interview.

of older plans. By 1974, 15 master plans had been updated, 20 plans were in the process of being revised, and 2 plans were scheduled for future update.<sup>82</sup>

A few examples of master plans prepared during this period illustrates the importance of this program. The Construction Battalion Center, Gulfport, Mississippi served as the "guinea pig" for the expanded master planning effort of the 1960s. Later, the Command's master plan for the Naval Weapons Station, Concord, California pointed out the need to acquire the adjacent town of Port Chicago as a safety buffer zone. During the 1970s a master plan was prepared for the extremely important support site of the Navy's new Trident missile and submarine system in Bangor, Washington. Equally as impressive was a preliminary concept study providing an initial planning overview for the Uniformed Services University of the Health Sciences.<sup>83</sup>

#### Regional Planning

Regional planning was in essence just an expansion of the master planning concept to encompass an entire geographic region and the many Naval activities located within it. During the creation of a regional plan naval activities were evaluated on the basis of total Navy requirements, total community impact, and total land usage

---

<sup>82</sup> Pledger interview.

<sup>83</sup> Pledger interview; Interview with Mr. E. Feiner, NAVFAC Shore Facilities Planning, Code 2021, 27 Jul 1975; Final Master Plan--Trident Support Site (Jan 1975); A Preliminary Concept Study--Uniform Services University of the Health Sciences (Jan 1974).

to derive the most balanced plan for that region. The result was a determination of those facilities essential to the Navy's mission in that area. The plan also sought the greatest possible utilization of land holdings and facilities along with satisfaction, if possible, of community property desires.<sup>84</sup>

The growth of regional planning within the Command accompanied a growing realization that military installation planning must take into greater account the growth and development of surrounding civilian areas.<sup>85</sup> This was perhaps nowhere more evident than in Southern California where expansion of the civilian community was rampant and accomplishment of the large military mission in that region was threatened.<sup>86</sup> Besides frantic demands for land on waterfront areas of key importance to the Navy, dramatic requirements for increased commercial air facilities provided an immediate impact on military air fields and air space. Since the Navy was the predominant Department of Defense landholder in Southern California, the Command was tasked with the execution of a searching appraisal of military requirements in the form of a regional study.<sup>87</sup>

Subsequent regional plans were prepared for areas experiencing similar hardships. Among them were Project FRESH which studied the

---

<sup>84</sup> CAPT R. E. Anderson, CEC, USN, "Facilities Planning," The Navy Civil Engineer (Spring 1972).

<sup>85</sup> Dowling remarks.

<sup>86</sup> Memo from COMNAVFAC to CNM of 14 Aug 1968; Memo from CNM to CNO of Aug 1968.

<sup>87</sup> Ibid.

total Department of Defense requirement in Oahu, Hawaii and Project WIRE which was a complex determination of military requirements in the entire southwestern portion of the United States.<sup>88</sup> A joint service regional study of Guam and Tinian, known as Project GATEWAY, was aimed at identifying the western most geographic position suitable for accommodating United States forces in the event of an evacuation from bases in the far east.<sup>89</sup> The Guam Midrange Regional Study sought better land utilization by Department of Defense activities on that island.<sup>90</sup>

Also of significance was the National Capital Region Plan. The Command, long familiar with the urban milieu peculiar to the location of most naval installations, was assigned the task of preparing a comprehensive plan for Department of Defense facilities in the Washington, D.C. area. Utilizing a unique team planning concept, existing facilities were examined and then compared with functional facility requirements. The resulting plan called for the consolidation of 88 scattered defense facilities into 22 longrange locations augmented by new construction.<sup>91</sup>

---

<sup>88</sup>McGuire interview; Project WIRE also addressed the Southern California problem mentioned above.

<sup>89</sup>Ibid.; Pledger interview.

<sup>90</sup>McGuire interview.

<sup>91</sup>LTJG W. D. Fraught, CEC, USN, "Long Range DOD Facilities Planning for Washington," The Navy Civil Engineer (Spring 1972); L. P. Earle, "A Capital Bit of Urban Planning," The Navy Civil Engineer (Winter 1974).

### Functional Planning

With the team concept of master planning came the specialization of planners in different functional areas such as shipyards, air stations, and ammunition depots. An unusual outgrowth was the preparation of planning studies which concerned a particular functional realm. Thus, added to the growing repertoire of Command planning capabilities were functional or systems studies.<sup>92</sup>

A few examples might serve to illustrate this important new planning device. For example, a containerization study of ordnance material was performed by the Command for the Naval Weapons Station in Concord, California.<sup>93</sup> For many years the safe transshipment of explosives had presented a very real problem for such naval activities. The initial functional planning effort had been to reduce the repeated handling of ordnance materials through palletization. Eventually, however, the Command also achieved the reduced handling of the pallets themselves through containerization. The result of the study was better protection for these sensitive shipments at a reduced cost.

Another example of functional or systems planning involved the Naval Training Command. Total training requirements were examined in light of total training facility assets. The approach was much the same as that used for a regional plan but encompassed scattered activities nationwide. Taking into account community desires, the

---

<sup>92</sup> Pledger interview.

<sup>93</sup> Revised Three Phase Plan to Implement the Handling of Containerized Ordnance Shipments at Naval Weapons Station, Concord.

plan identified the best possible utilization of assets to carry out the Naval Training Command's important mission.<sup>94</sup>

#### Special Studies and Other Planning Actions

A great deal of the Command's installation planning workload was filled with projects on a smaller scale than the comprehensive plans described above. Small planning problems which required a more quick and immediate response comprised this multifaceted function.<sup>95</sup> Special planning studies examined a very small geographical area of a naval installation. Technical support studies looked at a small functional portion of what would be considered a final master plan. For instance, the Command may look solely at the transportation problems of a particular activity and plan for its intelligent development or improvement. The very smallest and most reactive planning task was consultation. An activity with a limited and immediate planning problem would approach the Command for guidance. Although the response to each problem was also small, numerous consultations often proved to be time consuming. It was anticipated that in the future special architectural studies would be prepared for various regions in order to blend resident naval facilities with the architectural style of that area.<sup>96</sup>

---

<sup>94</sup>CAPT R. C. Anderson, "Facilities Planning."

<sup>95</sup>Recognition for the accomplishment of these more limited short term planning tasks was just beginning to surface toward the end of the period under consideration.

<sup>96</sup>Pledger interview.



### General Development Maps

The Command continued to devote considerable effort to the preparation and maintenance of General Development Maps and other planning maps. The General Development Map, a key planning tool, was prepared for each shore activity to which real estate was assigned. It depicted total facilities, planned and existing, required to support an activity. It must also be in consonance with inventory and planning data and so required constant updating. The Command bore full responsibility, including financial, for these and other planning maps.<sup>97</sup>

Perhaps one of the most important uses of the General Development Map was to determine the most suitable location of planned, new construction. Overall, it served as the current and future plan for each activity not selected for inclusion in the master planning program.<sup>98</sup>

During the 1960s, through an agreement with the Naval Oceanographic Office, arrangements were made which provided better maps at a considerably smaller cost than before. This was important in view of new and original data being fed into the system.<sup>99</sup>

By the 1970s a new technique of preparing General Development Maps from aerial photographs had emerged. The Command utilized

---

<sup>97</sup> NAVDOCKS P-340, p. 31.

<sup>98</sup> Interview with Mr. H. R. Kreiser, NAVFAC Shore Facilities Planning, Code 2022, 29 Jul 1975.

<sup>99</sup> McGuire remarks.

the services of the Defense Mapping Agency for the execution of this program which included the preparation of General Development Maps for 24,000 acres at a cost of \$150,000 per year.<sup>100</sup>

#### Site Approval

Another planning responsibility, site approval, was the guardian for the proper implementation of an installation's master plan or its General Development Map, the "mini-master plan."<sup>101</sup> Prior to the preparation of preliminary designs for the construction of new facilities, the selected site must be approved by the Command. Actual approval entailed assurance that the location was consistent with good land use planning principles, considered potential future facility development and would result in an efficient and economical operational arrangement.<sup>102</sup>

Certain activities with peculiar safety hazards required even greater scrutiny prior to site approval. For instance, electromagnetic radiation emitted from transmitter/antenna installations, aircraft at naval air stations, and ordnance materials at naval ammunition depots could all prove potentially dangerous if facilities were improperly sited.<sup>103</sup>

---

<sup>100</sup>Kreiser interview.

<sup>101</sup>Ibid.

<sup>102</sup>NAVFAC Instruction 11010.57 of 20 Mar 1972.

<sup>103</sup>NAVFAC Instruction 8020.3A of 21 Apr 1971; NAVFAC Instruction 8020.2B of 4 Oct 1968; NAVFAC Instruction 11010.50 of 26 Mar 1970.

### Encroachment

Between 1965 and 1974 the Command administered for the Chief of Naval Operations two important programs directed at safeguarding the Navy's investment in real property. The first, identified as Project Guardian, was initiated in 1967. Under its auspices each naval installation was required to submit reports of nearby community land or resource development which might jeopardize the present or future use of an existing naval facility.<sup>104</sup>

While encroachment was not limited to urban areas, problems at these locations were more readily recognizable and, if left unchecked, the results were certainly more dramatic. With many key naval installations located in such highly populated areas, Project Guardian was of special import. In short, early detection of potential encroachments and assessment of their impact on the use of Navy property was essential for protecting and maintaining the future usefulness of Navy installations.<sup>105</sup>

By 1972 the program had reached the stage where an annual revision of the previous year's encroachment report was adequate to maintain the momentum inspired during the initial years of Project Guardian.<sup>106</sup>

---

<sup>104</sup> Kreiser interview.

<sup>105</sup> OPNAV Instruction 11011.12 of 27 Oct 1972.

<sup>106</sup> Ibid.

The second program, Air Installation Compatible Use Zone (AICUZ), complemented Project Guardian but concentrated on only one type of activity, the naval air station. Similarly, the purpose of the program was twofold--to protect air installations from urban encroachment and protect the public's safety, health and welfare.<sup>107</sup>

The program was instituted in 1973 in response to a growing awareness that mere warnings about the high noise level and accident potential around air installations were not sufficient to limit incompatible development. To execute the program, a formal plan was to be prepared for naval air installations and implementation of the plan centered around noise abatement projects, land-use planning, and real estate actions. Other more informal methods were also to be employed when necessary in order to halt possible encroachment problems.<sup>108</sup>

An encouraging situation was pending in 1974 with a proposed amendment to a county zoning ordinance which incorporated the AICUZ concept. If adopted it would prevent incompatible development around the Naval Air Station, Patuxent River, Maryland. A resounding victory for AICUZ, it would be the first time in history that AICUZ terminology would be included in a county zoning ordinance.<sup>109</sup>

---

<sup>107</sup> NAVFAC Instruction 11010.60A of 30 Oct 1974.

<sup>108</sup> Interview with Mr. D. W. Copp, NAVFAC Shore Facilities Planning, Code 202AA, 29 Jul 1975.

<sup>109</sup> "AICUZ Progresses at Patuxent River," CEC Biweekly Report.

## CONTINGENCY PLANNING

During the period 1965 to 1974 the Naval Facilities Engineering Command, at the behest of the Chief of Naval Operations, prepared Base Development Plans in support of contingency or wartime operational plans for the Fleet Commanders-in-Chief.<sup>110</sup> For obvious reasons, the effort was concentrated in the Command's Atlantic and Pacific Engineering Field Divisions. Atlantic Division supported the contingency plans of CINCLANTFLT and CINCUSNAVEUR while the Pacific Division supported CINCPACFLT.

Prior to 1970 the Command was provided with a list of bases that were deemed necessary to support a general or rather unspecific mobilization condition. The resultant plans prepared for individual bases in many countries were reminiscent of the plans necessary in the event of a general world-wide conflict similar to the Second World War.<sup>111</sup>

Realizing that such a system was more backward than forward looking, the Joints Chiefs of Staff revised contingency planning methodology. In 1970 the Joint Operation Planning System (JOPS) was established.<sup>112</sup> The JOPS required preparation of Base Development Plans for specific contingency scenarios. The Plans were now part of a package which sought to examine in-depth an entire region as opposed to individual bases. It was anticipated that by

---

<sup>110</sup>OPNAV Instruction 4040.33E of 19 Feb 1974.

<sup>111</sup>Cason interview.

<sup>112</sup>Joint Operation Planning System (JOPS), Volume I (NOTAL).

July of 1975 the Command would have prepared all of the Base Development Plans necessary to encompass the eight major contingency scenarios identified by the JOPS.<sup>113</sup>

The preparation of Base Development Studies was an added responsibility of the Command. These studies included such key information as the capabilities of ports and airfields and the availability of construction resources throughout the free world.<sup>114</sup>

A new twist in Base Development Studies was expected in 1975. By the fall of this year it was anticipated that Base Development Studies previously prepared manually on hard copy, would be prepared and published in automated format.<sup>115</sup> Programming and processing would be accomplished at the Command's Facilities Systems Office (FACSO) in Port Hueneme, California. The impetus for this development stemmed from resource constraints which restricted the manual preparation and update of Base Development Studies. It was hoped that this new approach would allow the Command to maintain the viability of the program under limiting fiscal conditions.<sup>116</sup>

#### MACRO-PLANNING

Following the suggestions of its own study groups, the Command began in September 1966 to develop a systems analysis and operations

---

<sup>113</sup>Cason interview.

<sup>114</sup>Ibid.

<sup>115</sup>"Facilities/Construction Contingency Studies; A New Approach," The Navy Civil Engineer.

<sup>116</sup>Cason interview.

research capability for use in macro-planning of facilities.<sup>117</sup> Macro-planning involved a contextual or interrelated approach to problem solving. Rather than concentrating on each of a series of isolated projects, it attempted to deal with the effects of individual actions on a larger whole. In facilities planning, the "micro" approach concentrated on individual line items whereas macro-planning involved analysis within entire categories of facilities in an effort to achieve maximum benefit for the entire naval shore establishment. While micro-planning studies were also conducted, the greatest contribution came from an investigation of the "macro" aspects of problems.<sup>118</sup>

Impetus for the development of this capability came from a comparison of the management decision making techniques for capital investment of private industry with Department of Defense practices. It was observed that the Department of Defense had much to gain by adopting industry techniques. Thus, as a result, quantification of values in management decision making was readily incorporated.<sup>119</sup>

The three major functions performed by the Command's systems analysis staff were economic analysis, systems analysis/operations research studies, and staff support to the Command and higher authority.<sup>120</sup>

---

<sup>117</sup>Topic III-A Report; Shockey Report; "The Need for Systems Analysis" (undated NAVFAC briefing).

<sup>118</sup>Report on Systems Analysis Division (9 Jan 1969).

<sup>119</sup>Ibid.

<sup>120</sup>Interview with Mr. F. T. Trippi, NAVFAC Shore Facilities Planning, Code 203A, 30 Jul 1975.

Economic analysis responsibilities encompassed the development of quantitative techniques utilized in the planning and programming of the Navy's shore facilities. Preparation of instructions, and manuals, coordination of analysis with other services, and training in the use of these techniques comprised the bulk of these responsibilities.<sup>121</sup>

In performing economic analysis prospective projects were broken down into segments and, after applying quantitative techniques, various alternatives were identified in light of their cost effectiveness. To assist others in performing economic analysis the Command prepared instructions and manuals on this subject.<sup>122</sup> It "ghost" wrote the Department of Defense instruction and officially wrote the Secretary of the Navy and Command instructions on economic analysis. Concomitant with this, it prepared a handbook, first published in 1971, which served as a useful guide to economic analysis. A revision of this handbook with new, additional techniques was expected to go to press in the fall of 1975.<sup>123</sup>

In coordinating their efforts with the other services, Command personnel attended symposiums and conferences to trade ideas and maintain a steady dialogue with other experts in their field.

---

<sup>121</sup> Trippi interview; "Mission Functions" (undated NAVFAC briefing).

<sup>122</sup> Ibid.

<sup>123</sup> Trippi interview; The Basic Economic-Analysis Instruction Chain for Military Construction Projects; Since issued the revised handbook has been adopted for use by the U.S. Coast Guard and is being considered for adoption as a standard reference document by the Department of Defense and other services.



Training for the Navy at large was also provided by Command staff specialists through the Navy Logistic Management School, an economic analysis course offered at the Command's Civil Engineer Corps Officers School in Port Hueneme, California, and seminars at the Command's Engineering Field Divisions.<sup>124</sup>

Systems analysis and operations research studies, as generally defined above, are best described by pertinent examples. Key projects completed by the Command during the 1960s included, among others, a study of operational workload planning to aid the Office of the Chief of Naval Operations in developing the Logistic Support Requirement System; the development of a rationale for the first Navy investment program based on a geographic master plan (Sewells Point); a cost analysis of enlisted and bachelor officers quarters; and a critique on the Kaiser Shipyard Modernization Study.<sup>125</sup> In the 1970s studies also dealt with such questions as the identification of a capital investment program to reduce Navy energy consumption; the possibility of using excess Navy facilities to improve the economic posture of the fishing industry in the Northeast; an automated facility requirements generator, the ABLE model, for use in contingency planning; and an investigation of the potential for the joint Navy/Industry capitalization of nuclear generating plants to provide less expensive power for tidewater base complexes.<sup>126</sup>

---

<sup>124</sup>Trippi interview.

<sup>125</sup>Report on Systems Analysis Division.

<sup>126</sup>"Mission Functions."

The final function, that of providing support within the Command and to higher authority is generally self-explanatory. Problems of cross-consideration and how to acquire the most from the Command's limited investment dollars comprised most of the effort. Examples of staff support included research on prefabricated housing for the Command's family housing group and representation of the Command on a Base Closure Study for the Shore Establishment Realignment.<sup>127</sup>

#### PROFESSIONALISM

A matter of special concern to the Command in the conduct of its Shore Facilities Planning Program was the recruitment of top flight personnel to carry out each area of planning endeavor. It took great care to hire only the most competent individuals in the multi-disciplined planning field. Despite its ultimate success, this was a particularly difficult task. Although most large universities offered a planning curriculum, none included coursework in military planning, a field with peculiarities unto itself. An attempt was made to encourage universities to include this subject in the broad spectrum of their planning curriculum. In addition, individuals accomplished in specific, specialized career fields, necessary for an exceptional planning staff, were somewhat difficult to locate. For instance, the Command hired the only

---

<sup>127</sup>Trippi interview.

landscape architects in the Navy and the budding field of systems analysis had limited numbers of personnel trained in its discipline.<sup>128</sup>

The Command also sought to bridge the gap and eliminate the conflict between community and military planners by encouraging professional registration and membership in professional associations. In this manner, the Command was able to gain respect and visibility for its very accomplished planning staff. An added benefit was the growing dialogue and, thus, smoother working relationship between Navy planners and their counterparts in the civilian community.<sup>129</sup>

#### CONCLUSION

The years 1965 through 1974 were years of rapid growth in the field of shore facilities planning. While the late 1960s brought revolutionary changes, the process of consolidation, refinement, and fuller implementation of already instituted improvements, for the most part, filled the 1970s.

In the dynamic atmosphere of planning, however, new trends were constantly on the horizon. More formalized attention would be paid to the many naval activities dotting the nation's coastlines as a part of new concepts in coastal zone management.

---

<sup>128</sup> McGuire interview.

<sup>129</sup> Ibid.

Relating military facilities planning to overall growth in the civilian sector of the economy remained a major item on the agenda. It was also anticipated that regional and functional/systems planning would continue to expand in importance.