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The Failure of the Fast Deployment Logistics Ship

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In 1966 Mr. McNamara requested appropriations for four Fast Deployment Logistics (FDL) ships. The program embodied several innovations, two of which were design development by the contractor and a packaging concept–purchase of 30 ships from a single contractor which would result in lower unit costs and shipyard innovation and modernization. While the program was basically sound, the inclusion of these concepts, among others, made it possible for the opposition to the FDL to coalesce and transform the bill into "an exercise in futility." In the future it would be advisable for the Defense Department to examine beforehand the preliminary attitude of Congress, labor, and the maritime industry to major defense programs before committing sizable funds for procurements under radically new procedures.

THE FAILURE OF THE FAST DEPLOYMENT LOGISTICS SHIP

A research paper prepared

by

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To the Secretary of Defense, Fast Deployment Logistics ships (FDL's) were an essential component of a strategic capability for rapid military response, but to a labor leader they were "McNamara's floating Edsels"[1] and "super juggernauts of the sea."[2] A congressional leader feared that FDL's would lead other nations to think the United States has "assumed the function of policing the world,"[3] while an author wrote that the entire FDL project was "a siren song of false promise tending to divert money and effort from a broad mission to one of specialized employment."[4] Such were the emotions aroused by the Fast Deployment Logistics ship. Why was the response so strong? The evidence indicates that the FDL was misunderstood, threatened powerful interests, and ran headlong into congressional determination to exercise its constitutional authority over American foreign involvements. This paper will outline the development of the FDL project and analyze the interests and forces which disturbed the waters around the FDL and contributed to its defeat.

Proposals for the Fast Deployment Logistics ship were part of the effort to implement a strategic concept known as rapid deployment. The objective of this strategy was to respond quickly and forcefully to actual or threatened aggression wherever it occurred. Studies by the Joint Chiefs of Staff, the Office of the Secretary of Defense, and the three services corroborated the concept. These studies concluded that a quick response with a potent force would often avoid conflict or, if conflict were unavoidable, then the rapid response would end the conflict sooner, reduce

the size of U.S. forces needed, minimize U.S. and allied casualties, and diminish destruction in the conflict area.[5]

There are four methods to achieve a rapid response capability. The fastest possible response can be ensured by deploying military forces to all likely areas of conflict. This method presents many undesirable features which counterbalance its quick reaction capability. It is costly and unresponsive to crises in unforeseen locations, it requires a politically unpopular peacetime deployment of large U.S. forces, and it includes the diplomatic problems which inevitably develop when forces are stationed abroad.

A second method keeps the response force and its equipment in CONUS. This strategic reserve is available for air deployment to wherever it is needed. This system minimizes the number of troops stationed overseas, does not require such large combat forces, and avoids diplomatic involvements and adverse gold flows, but it also requires an enormous investment in airlift forces.

The other two methods use a combination of centrally located, highly mobile troop reserves and prepositioned equipment. In one system the equipment is stored ashore at fixed depots. In the other it is stowed afloat in ships. The latter variation offers the added advantages of mobility and security for the stored equipment and elimination of host-country difficulties. This system also makes the most effective use of the different transportation modes. Men based in CONUS move to the objective quickly and efficiently by air. The heavy, bulky equipment moves most economically by ship and can be prepositioned in the general area of the deployment.

It was the latter rapid deployment method which Defense Secretary McNamara selected for development. The FDL was conceived to perform the prepositioned sealift function; the C-5A, a giant aircraft then under development, was scheduled to accomplish the airlift role. These complementary elements were to combine to make rapid mobility a reality. When aggression threatened, FDL's full of combat equipment would move to preselected deployment zones near the area of the crisis. When U.S. commitment was ordered, troops of the CONUS strategic reserve would embark in C-5A aircraft and fly to the scene while the FDL's were moving to their offloading sites. The men and the equipment would combine to form an instant fighting force.

As a ship concept, the FDL underwent several distinct phases of development. Its forerunners were the Forward Floating Depots (FFD's), three Victory ships which were converted to mobile depots in Fiscal Year (FY) 1963. Their cargo holds dehumidified, the FFD's were loaded with supplies and equipment for an Army combat force and stationed at Subic Bay. After Exercise Quick Release in February 1964 demonstrated the soundness of shipboard prepositioning, plans were made to expand this fleet. When the limitations of speed, cargo capacity, and rudimentary cargo handling systems of the World War II ships were considered, however, the FFD plans were revised and became the initial FDL proposal.

Instead of converting more old slow ships into floating depots, fast new ships, tailored to suit the mission, were to be built. They would have better cargo handling and loading arrangements, adequate equipment maintenance facilities, and some authorities even suggested the use of a roll-on/roll-off configuration and gas turbine propulsion.[6]

This ship concept, the first to bear the designation "FDL," did not last long. It was proposed in the FY 1966 budget, but by the time the FY 1968 budget was drafted, it had been merged with another scheme. As a ship its mission had not changed, but instead of following the Navy's customary

development procedures, the FDL became the trial horse for a new method of ship design and procurement.

In the past, combatant ships had been designed by technical specialists within the Navy's Bureau of Ships (now the Ships Systems Command). These designers prepared detailed plans and specifications for every ship class. After the plans were complete, builders were selected by competitive bidding, and the ships were built according to the Navy plans.

With the FDL, all this was changed. It was to be procured by an adaptation of an Air Force procurement system known as Concept Formulation/Contract Definition. Instead of preparing detailed plans, the Bureau of Ships compiled a list of physical and operational characteristics and capabilities which the FDL was to have. This was Concept Formulation; it was the first phase of the ship's development.

Some of the characteristics which the Navy required in the FDL were ability to carry the equipment and supplies for a specified tactical unit (later identified as an Infantry Division Force); provision for access to the stowed equipment and facilities for maintenance of the equipment over extended periods of time; humidity control; ventilation and fuel systems to permit operation of vehicle engines while stowed; secure stowage spaces for nonvehicular cargo and supplies, with particular emphasis on large-volume and bulky equipment such as helicopters; physical dimensions compatible with most piers, ports, and interocean canals; ability to unload across the beach or at a pier within specified time limits; ability to handle and fuel helicopters for vertical unloading; capacity to carry and facilities to launch lighters and boats needed for over-the-beach delivery; efficient propulsion for high-speed transits and low-speed loitering on deployed stations; and minimum arrangement for provisions for future installation of light armament.[7]

The Contract Definition phase of the procurement process occurred in two parts. During the first, participating ship designers and builders worked at their own expense to draft rough plans for a vessel which met the required performance standards. The second part, which was contract supported, consisted of detailed development and engineering of the most promising proposals.

The FDL which emerged from the Contract Definition process had the following characteristics. It was to be 855 feet long with a 104-foot beam and a 28-foot draft, dimensions which permitted it to transit the Panama Canal. At designed draft it would have a freeboard of 58½ feet and displace 40,000 tons: it was a very large ship. With a cruising speed of 25 knots, using a steam propulsion plant, the ship required a crew of 35 to 40 men plus an Army maintenance detachment to take care of embarked equipment.[8]

Ships built to the FDL design selected by the Navy were expected to cost $46 million each when purchased in a group of 30 ships. Although the Navy had placed an estimate of $35.6 million on its early FDL design, the new design was actually cheaper since 30 new FDL's would be equivalent to 54 of the Navy's design.[9] Four of the new FDL's could move an infantry division's equipment with 15 days of supply and an initial load of fuels and lubricants (POL). Eight ships could carry an armored division with 60 percent of its support units, 15 days of supply, and an initial load of POL. Moving an infantry division force of unspecified composition would take 12 FDL's.[10]

In the fleet the FDL was expected to operate in one of four modes. In descending order of readiness and responsiveness, they were loaded and deployed, loaded and in port in CONUS, partially loaded and in port in a forward area, and partially loaded and in port in

CONUS. In the partially loaded modes, the ships would have a standard load of supplies and rations aboard. They would be moored in proximity to the equipment scheduled for loading in the event of a deployment. In all modes, the ships were "on alert" for deployment.

Plans called for the FDL's to be manned by civil service merchant marine crews. These professional mariners, most of whom were career personnel, had established a long record of proficiency and reliability in the MSTS nucleus fleet. These traits were essential in the crews because the ships' effectiveness depended upon the prompt execution of sailing orders.

For the present analysis the FDL project's most significant features were its innovations. It broke with tradition in many ways, and it set out to accomplish at least one goal which had not previously been viewed as a Navy responsibility. These innovations are important because they were the basis for much of the opposition to the FDL.

The most conspicuous innovation was the new design and procurement procedure outlined above. Taking the Navy out of the detailed design business and substituting private industry's designers was, in fact, a stated objective of the FDL project: "Increased industry input into naval ship design and construction."[11]

A second, closely related innovation was the application of the "total package" concept to ship procurement. Through this approach, procurement decisions were not based solely upon ship construction costs, as they had been in the past, but upon a comprehensive collection of ship costs. The total package included ship design and development, integration of the ship's design with production planning, ship construction on a multiyear series production basis, and guarantees of ship performance, including reliability, maintainability, and specified upkeep and operating costs.[12]

Implicit in the "total package" approach was the decision to purchase all of the ships from a single source. To obtain the cost reductions expected from series production and standardization of equipment within and between ships, the "package" contract had to include the entire class of ships. This was another sharp departure from the customary practice of spreading ship purchases out among many builders.

Finally, the FDL project intended to influence the condition of the American shipbuilding industry, a goal which the Navy had not previously pursued. By integrating design and construction and offering a long-term, multiple-ship contract to a single builder, the project hoped to accelerate modernization of shipyards and shipbuilding techniques. The designer-builder was free to adapt his design proposal to his facilities—to propose a ship which his yard could build efficiently. The prospects of a long-term production run would also enable the builder to make major investments to modernize and rationalize his facilities. Both of these factors were expected to increase the efficiency of the shipbuilding process. The added efficiency was also expected to improve the yard's ability to build commercial vessels for private industry. Clearly, the Department of Defense hoped that the FDL project (in conjunction with subsequent "total package," Contract Definition projects) would start a wave of modernization sweeping through the American shipbuilding industry, an industry which lagged far behind on the world market.

Conceptually, the FDL dates back to 1953 when the Army first considered seaborne prepositioning of its equipment. The idea languished until the Strike Command was established in 1961, and the Joint Chiefs of Staff and the Secretary of Defense began to consider a combination of airlift and prepositioning as an operational readiness technique.

The result of this initial evaluation of afloat prepositioning was the Forward Floating Depot program. Growth of the Fast Deployment Logistic ship concept shifted into a higher gear in 1964 when the Chief of Naval Operations directed a study of naval support for land forces. This study, "Logistic Support of a Land Campaign, 1969-1972," (LOGLAND) demonstrated distinct advantages in a rapid deployment system which combined sealift, airlift, and prepositioning.[13] The study group even developed a conceptual design for a Fast Deployment Logistic ship and studied its cost-effectiveness. It was such an FDL which the Navy requested in its FY 1966 budget.

The 1966 budget asked for authorization and funds to construct four FDL's. After very little public discussion of the request or the strategy which it symbolized, two FDL's were authorized and $67.6 million was appropriated for their construction.

The FDL was selected for the trial application of Contract Definition and total package procurement in late 1965. It was early 1967 before details of the new FDL design were incorporated into another budget request. Five FDL's were requested by the Department of Defense in its FY 1968 budget. The funds appropriated in the 1966 budget were still available, and the Department planned to combine the two previously authorized and funded FDL's and the newly requested ships; the seven ships would be the first increment of the total FDL package.

In contrast to the 1966 proposal, the 1968 FDL request received extended and acrimonious public attention. When the smoke had cleared, the FDL had suffered a sharp rebuff. The House Armed Services Committee recommended approval of two new FDL's, but it also placed severe constraints on future FDL requests.[14] The Senate Armed Services Committee also held hearings on the subject, but it decided to delete the FDL proposal from the procurement bill. The Senate Committee went beyond this, however, and in effect rescinded the 1966 authorization and appropriation. To resolve the differences between the House and Senate procurement bills, the measure was referred to a conference committee. In conference the Senate version prevailed, and all FDL authorizations and appropriations were eliminated.

In the Department of Defense this congressional action was viewed as a setback, but not as a defeat. Seven months later a Navy representative told a shipping conference that the FDL was not dead and that the proposal would be resubmitted.[15]

In its FY 1969 budget request, the Navy asked for $183.6 million to build the first four of a proposed class of 30 Fast Deployment Logistics ships. The proposal received less attention during the committee hearings than it did the preceding year, but the opinions which were expressed tended to be more hostile. The FDL's opponents spoke out repeatedly; its supporters were less vocal. The result was the same, although there was a curious switch in the roles. The House Armed Services Committee voted to cancel the FDL request, but the Senate Armed Services Committee voted to approve it. Once again the bill went to a conference committee, and once again the compromise bill contained no FDL's. According to their report, "the conferees after extended discussion agreed that while there were many reasons why this program should be supported, the current fiscal situation dictated that they [the FDL's] should be eliminated from the program, without prejudice, this year."[16]

Although its days were numbered, the FDL clung to life with remarkable stubbornness. The Navy closed its FDL Project Manager's office on 30 June 1969. The Navy's budget proposal for FY 1970 did not contain a request for

authorization or funding of Fast Deployment Logistics ships. The ship was rescued from oblivion by the Office of the Secretary of Defense, for that office insisted that the Navy insert an FDL request into the "Shipbuilding and Conversion" budget.

The Fiscal Year 1970 request was scaled down considerably from earlier proposals. While still citing a "JCS requirement" for 30 FDL's, "in view of past opposition to the program," the Navy now spoke of a 15-ship FDL fleet.[17] The Navy requested $186.7 million for the first increment of three ships. This item was deleted from the Department of Defense Procurement Bill in the Senate. It never appeared in the version presented to the House of Representatives, but the House Armed Services Committee Report on the bill expressed concurrence with the Senate's action.[18]

The FDL had made its last comeback. It was not even mentioned in the Fiscal Year 1971 budgets submitted by either the Navy or the Defense Department. Senator Russell's complaint about the FDL at the 1970 budget hearings proved prophetic: "I don't know how many more years they [the Defense Department] will keep sending it up here. It is an exercise in futility."[19]

Having declared the FDL dead, a postmortem examination is in order. Two questions must be answered. Who or what killed the FDL, and what are the lessons to be learned from the FDL experience?

No single person or group was responsible for terminating the FDL. It was the cumulative result of many such groups, each working toward its own goals or protecting its own interests.

Although it was presented as a Navy project, the FDL actually encountered serious opposition within the Navy Department, particularly from the Bureau of Ships. The Concept Formulation/Contract Definition process threatened to replace the Bureau of Ships as the primary designer of Navy ships, a course which met with little favor among the Bureau's personnel. Emotions on this point and on a pending Navy Department reorganization were so strong that Rear Adm. W.A. Brockett, Chief of the Bureau of Ships, and his deputy, Rear Adm. Charles C. Curtze, resigned in October 1965. Both officers acknowledged that the shift of design responsibility to civilian contractors was a contributory factor in their decisions to resign.[20] This issue was not limited to an intra-Navy affair, however, since a few Congressmen also wanted to keep ship design responsibility and construction management with the Bureau of Ships or its successor, the Ships Systems Command.

Many FDL opponents argued that the Fast Deployment Logistics ship would compete with the merchant marine in several ways. In spite of repeated assurances by Defense and Navy officials that FDL's would not be employed in point-to-point service during peacetime, shipowners and operators thought otherwise. Many agreed with Capt. Lloyd W. Sheldon, president of the International organization of Master Mates and Pilots, who saw the FDL as a "power grab" intended to drive both unions and private industry out of military shipping.[21] Other leaders, such as Capt. J.W. Clark, former chairman of the Committee of American Steamship Lines (CASL), and William B. Rand, president of United States Lines and the new chairman of CASL, concurred with the prediction made by Ralph E. Casey, president of American Merchant Marine Institute and former employee of the General Accounting Office (GAO). He testified that he could

> . . . well envisage some future period of temporary or permanent peace when the incumbent Controller General, noting the billions expended to construct and

> operate these prepositioned floating warehouses, will submit to the Congress a report pointing up the anomalous situation created by the chartering and use of commercial vessels for military cargo when these vastly expensive supply ships continue floating aimlessly about.[22]

In support of Mr. Casey's prediction, the FDL's opponents noted that the Defense Department's repeated assurances about the FDL's use were deceptive if accepted at face value. They argued that the contemporary administration could not bind any future administration regarding the ships' employment any more than one Congress could commit succeeding Congresses to support a given policy. The ultimate fate of the FFD's also worked against the Defense Department. Their stores were unloaded and used in Southeast Asia, and the ships were promptly placed in service as cargo vessels operating in point-to-point service.

A recent GAO report to the Environmental Sciences Services Administration (ESSA) testifies to the clarity of Mr. Casey's crystal ball. GAO told ESSA that its 14 hydrographic vessels were "too expensive not to be used."[23] Although the report only suggested more intensive operation of the survey vessels and did not imply that they should perform an alternate function, the Controller General's willingness to criticize the service's use of ships is noteworthy.

It did the Navy and the Department of Defense little good to deny that the FDL's would supplant private vessels as cargo carriers. Secretary McNamara even offered to accept a legal prohibition against such use: "I want to make it perfectly clear to the committee, and I am perfectly prepared to have this written into the law if the committee chooses, that we will not use those ships in point-to-point service in peacetime."[24] Nevertheless, when the House Armed Services Committee went on record against the FDL in the FY 1970 budget, one of its reasons was that "the committee has not been convinced that these ships will not be used in competition with our private merchant marine."[25]

Congressional and industrial leaders also opposed the FDL because they feared it would compete with the merchant marine for Federal funds. In justifying his opposition to the FDL, Representative John M. Murphy (D., N.Y.) pointed out that in the FY 1969 budget the funds requested for the FDL were almost 10 times those asked for merchant ship construction ($183.6 and $19 million, respectively).[26]

Some who opposed the full FDL program did not object to construction of the two FDL prototypes which had been authorized and funded in the FY 1966 budget. Others, including Ralph E. Casey and Daniel D. Strohmeier (vice president, Shipbuilding, Bethlehem Steel Corp.), opposed all FDL construction. Mr. Casey charged that building two ships would prove nothing because the FFD's had demonstrated the feasibility of afloat prepositioning, and a two-ship building program would not be large enough to verify the FDL's ability to induce shipbuilding modernization.[27]

From the labor standpoint, the FDL had one wholehearted supporter in the person of Andrew A. Pettis, vice president of the Industrial Union of Marine and Shipbuilding Workers of America. Other labor leaders, particularly Joseph Curran, president of the National Maritime Union, and Paul Hall, president of Seafarers International Union, virgorously opposed it. So did Russell K. Berg, president of the International Brotherhood of Boilermakers, Iron Shipbuilders, Blacksmiths, Forgers and Helpers. Declaring the FDL program "unrealistic," he said it would be "throwing money away, tax dollars

Naval War College Review, Vol. 23 [1970], No. 8, Art. 7

. . . that could go into building a merchant marine . . ."[28]

At first the Defense Department responded to this criticism by pointing out that in addition to the ships required for rapid response, there was a continuing necessity for an adequate merchant marine. In the annual posture statement which accompanied the FY 1969 budget request, Secretary McNamara discussed the forces needed to support a rapid response capability. He said the sealift/airlift mix which would produce the desired capacity at the lowest cost included 460 "notional" commercial ships in addition to the proposed FDL's, C-5A's, and C-141's.[29] Later the Defense Department incorporated an expanded merchant marine into the rapid deployment package. In the FY 1970 proposals the reduction of the projected FDL fleet from 30 to 15 ships was to be offset by long-term charters of up to 30 new, privately constructed merchant ships.[30]

Some of the strongest opposition to the Fast Deployment Logistics ship project centered on its anticipated effect on the American shipbuilding industry. Since the multiple-ship, multiple-year purchase contracts of "total package" procurement were intended to induce modernization of the shipyards, the recipient of the FDL contract was expected to either build a new yard or completely modernize an existing one. This prospect alone raised the hackles of some. Respresentative Robert L. Leggett (D., Cal.), an opponent of the FDL for many reasons, decried this opportunity as "unjust enrichment."[31]

During the FY 1968 budget hearings, Representative William S. Mailliard (R., Cal.) had likened the Government's merchant marine policy to a "carrot and stick" system. The "carrot" was a small increase in funds for merchant ship construction. The "stick" was the FDL, a program which he characterized as "riddled with unanswered questions" and which he said was "looked upon by some as a means of bringing the shipbuilding industry kicking and screaming into the 20th century."[32]

Application of the Contract Definition procedure also antagonized the shipbuilding industry toward the FDL. The Defense Department only considered five prospective contractors qualified to compete in the Contract Definition Process. Three (General Dynamics Corp., Litton Systems, Inc., and Lockheed Co.) were primarily aerospace firms, although each owned a prodneing shipyard. The other two, both of whom dropped out of the bidding, were major shipyards: Todd Shipyards Corp. and Bethlehem Steel Co. As a Todd spokesman put it, "the requirements were such that the whole thing worked out in favor of the aerospace companies."[33]

This bias in favor of the industrial giants also incurred the wrath of the small shipbuilders and from their Congressional representatives. Senator Ellender (D., La.) viewed multiship procurement and the accompanying opportunity to modernize shipyards as a direct blow at small shipyards. As a *Navy Times* writer put it, a Congressman who voted for a single-source contract for FDL's could be voting to drive his district's shipyards into bankruptcy.[34]

In an apparent attempt to counter this objection, Secretary McNamara told a Senate hearing that he was not implying that all the FDL's should be built in the same yard, but only that "procurement should be made in economic lots like any other weapon."[35] This was not a very convincing position because it contradicted much of the pro-FDL case. The FDL's anticipated cost savings and standardization benefits rested largely on the assumption that the ships would be built in a single yard on a mass production basis.

In the case of Senator Richard Russell (D., Ga.), then Chairman of the Senate Armed Services Committee, the

fact that the FDL's airlift counterpart, the C-5A, was being built in Georgia undoubtedly impinged on his decisions. Senator Russell expected to be criticized for opposing the FDL, but he thought he would be accused of opposing the FDL to induce expansion of C-5A production. Instead, he reported "a mild attempt to coerce" him with suggestions that if Congress did not "accept the necessity for a rapid deployment capability of the FDL type, the numbers of C-5A required might have to be reduced."[36]

The established shipbuilders generally opposed the FDL project because it was too expensive and too risky for them to compete. Todd, Bethlehem Steel, and Newport News Shipbuilding and Drydock Co. either dropped out of the competition or declined the invitation to participate. As reasons they cited the costs of Contract Definition and the insecurity of their innovations. The latter fear was based on a "technical transfusion" provision which allowed the Defense Department to extract selected design features from losing proposals and incorporate them into the winning design. As a Todd representative summarized the situation,

> the money to be spent just to keep in the competition was more than we could afford. . . . it would have tied up too many engineering personnel. More than we had available, in fact. We simply could not spare that much money or people to compete for a contract we might not get . . .[37]

Mr. John V. Banks, executive vice president of National Steel and Shipbuilding Co. (NASS), expressed similar opinions. NASS chose not to enter the competition because they could not justify "assuming the unusual and indeterminable risks" which they perceived.[38] Specifically, NASS was unwilling to accept the potentially high cost of Contract Definition competition, the probable need for capital expansion to accommodate a program which was vulnerable to early termination by Congress, and the risk of guaranteeing costs of operation and maintenance of the ships when the company would have no control over either cost.

The full extent of shipbuilder opposition to the FDL never became evident in public, but the foregoing positions are probably representative of the industry. Shipbuilders are reluctant to speak out against Defense Department proposals because 80 percent of U.S. shipbuilding is Defense Department sponsored in one way or another. Shipbuilders have no desire to bite the hand that feeds them.

Within the shipbuilding industry other adverse effects from the FDL's total package program were predicted. Each contributed to the depth and strength of opposition to the FDL. The FDL might compete with private building programs for capital funds. The construction of a new or highly modernized shipyard would aggravate a critical shortage of skilled shipbuilding manpower and compound the worldwide surplus of shipbuilding facilities. Approval of the FDL would foreshadow an end to Department of Defense support for shipbuilding development along other lines, lines such as containerships, roll-on/roll-off vessels, and lighter-aboard-ship schemes, each of which promised significant and profitable applications in the private shipping industry. Each of these points found support among shippers, shipyard employees, and shipbuilders.[39] One infuriated shipowner was sufficiently antagonized to place a full-page ad in *The New York Times* denouncing the FDL as a "$2 Billion Government-Aerospace Boondoggle."[40] He was motivated in part, it appears, by a General Dynamics Corp. decision to drop one of his pet development pro-

Naval War College Review, Vol. 23 [1970], No. 8, Art. 7

jects in order to participate in the FDL competition.[41]

A more substantial objection was raised by those who questioned the FDL's impact on shipbuilding. The Commander of the Charleston Naval Shipyard pointed to the significant qualitative difference between the highly complex ships constructed in the United States and the simple ships which were being built by integrated, mass-production yards in Europe. He also observed that the last ships delivered under a long-series construction contract are likely to be obsolescent at the time of delivery, a significant cost element not taken into account in the pro-FDL arguments.[42]

The comparisons between European and American shipyards, a central element in the case supporting the FDL's "shipyard modernization" objective, were also called into question by Donald A. Holden, president of Newport News shipbuilding and Drydock Co. Reemphasizing the quality and complexity differences, Mr. Holden commented on one of the benefits to be obtained from series production. He addressed the so-called "learner's curve" which reflects increasing productivity in the building of each successive ship in a series of essentially identical ships. He pointed out that the sharp productivity gains observed in the modernized European yards were partly the result of using "relatively inexperienced labor, with new machinery and with production planning that is essentially untried."[43] Mr. Holden implied that these conditions would not exist in U.S. shipyards, and therefore the gains would be of a much smaller magnitude.

Bethlehem Steel's Daniel D. Strohmeier thought American shipyards faced a problem which the FDL could not solve. He argued that the project's attempt to make the shipyards competitive on the world market by rationalizing the production process and reducing yard costs was futile. He claimed that the price of a ship built in a foreign yard was less than an American shipyard paid for materials. Mr. Strohmeier concluded that "if the U.S. shipyard could reduce its yard operations cost to zero, it still could not compete in the world market."[44]

In Congress the FDL's stiffest opposition came from those who saw it as a system which would expand the President's powers. It would make it easier for him to involve the United States in foreign military expeditions without legislative consent. In the House of Representatives, Congressman Leggett (D., Cal.) considered the FDL an offensive craft which would antagonize other nations and possibly cause U.S. interventions. A most determined opponent on this score was Senator Richard Russell. He fought the FDL first as Chairman of the Senate Armed Services Committee and later as Chairman of the Senate Appropriations Committee. His committee deleted the FDL's from the FY 1968 budget because it feared the FDL might create "an impression that the United States has assumed the function of policing the world" and that the United States could be suspected of "considering intervention in any kind of strife or commotion occurring in any of the nations of the world."[45] On the Senate floor he predicted that prepositioning of equipment might influence our national decisions because "there is reason to think . . . that if it is easy for us to go anywhere and do anything, we will always be going somewhere and doing something."[46] The Senator's comments in committee sessions reveal that he was especially wary of intervention in Africa.[47]

Senator Russell was not alone in his opposition. Senator Stennis (D., Miss.), while willing to accept an FDL for the rapid response purposes outlined by the Defense Department, candidly admitted that he opposed many parts of the foreign policy which the FDL might be used to implement.[48] Senator Ellender

also opposed the FDL and the involvements which he thought it might induce. His sarcastic exchanges with the Secretary of the Navy at the FY 1969 Procurement Authorization Hearings reflected his hostility toward a policy of policing the world. At one point he said, "I am just wondering if the Department [of Defense] is looking ahead to the next place where we are going to be to defend the world."[49] Later he added, "It looks as though you are now getting ready to carry heavy equipment to areas far removed from our country. I presume that all that is being done because some of you feel that we are capable and should protect the world as a whole?"[50]

Repeated efforts by the Defense and Navy Departments to convince critics inside and outside Congress that the FDL did not mean any new national commitments apparently fell on deaf ears. It was an advanced case of aggravated credibility gap. In March 1966, Under Secretary of the Navy Baldwin defended the FDL against charges that it would constitute a threat to other nations. He pointed out that the ship would not be viewed as a threat because it was not an assault vessel. It would not be equipped to engage in combat landings, but would unload across the beach or at docks in secure areas.[51]

A month later, after the Senate had disapproved all FDL funds, the Secretary of Defense wrote a letter to Representative Rivers (D., S.C.), Chairman of the House Armed Services Committee, defending the role of the FDL. He wrote:

> It is not now, nor has it ever been, my intention to propel the United States into a role as world policeman. . . . We now have treaty commitments which may well involve us in combat . . . the question is whether we will be able to take action to support these commitments effectively or ineffectively. The FDLs are designed to allow us to react promptly and terminate the action quickly or perhaps to deter combat altogether because the other side recognizes we will respond so quickly they will lose if they initiate the action. If we are going to continue these commitments, then the FDL is a major factor in improving our combat capability, without it we will lack the ability to take full advantage of rapid deployment to lessen the cost and duration of war and to reduce casualties.[52]

A year later Secretary McNamara was still telling Congress the same story: "the FDLs, per se, would in no way add to or subtract from our commitments. But as long as we adhere to a policy of fulfilling our treaty commitments, we should be prepared to do so with the minimum political and military risks and the minimum costs in lives."[53]

The FDL was not wholly without supporters in Congress. Indeed, Senator John Tower (R., Tex.) stated the case in favor of the FDL with exceptional clarity as he attempted to gain reconsideration of the FDL proposals for FY 1968.[54] On the other hand, concern about the FDL's military involvement potential was not limited to Congress. The vocal president of the National Maritime Union and chairman of the AFL-CIO Maritime Committee, Mr. Joseph Curran, repeatedly condemned the FDL's because they would be "conducive to over-involvement on a unilateral basis in international affairs."[55]

With the American participation in Vietnam undergoing sharp criticism and many Congressmen having second thoughts on the subject, it was very unlikely that Congress would approve any policy which could be construed as a blank check for foreign involvement. As this grew evident, the Defense

Department offered a compromise. It suggested limitations on the FDL's operations. In addition to the statutory ban against using FDL's in point-to-point service, Secretary McNamara was willing to defer the forward deployment of the ships. He said they would not be sent to forward positions until Congress had completed a thorough review of the FDL concept and existing national commitments.[56] Navy Secretary Ignatius repeated the offer during FY 1969 budget hearings, specifying that assigning the ships' locations would be primarily an Army responsibility but that they would be kept in U.S. ports—including Hawaii—until the question of forward staging had been "satisfactorily resolved."[57]

Many of the FDL's defenders responded to the charges of interventionism by saying that the criticism was really aimed at the concept of rapid deployment and not at the FDL, which was only one of the means by which the Defense Department sought to achieve the desired capability. They argued that rapid response capability, in the form of a nonassault, noncombatant fleet would be no more provocative (and probably less so) than our 6th or 7th Fleets. They also pointed out that the mere existence of FDL's would not make it any easier or more likely for the United States to become involved unwisely in foreign operations than did the existence of C-141/C-5A aircraft and stockpiles prepositioned overseas.[58]

These arguments, assertions, and assurances did not convince the FDL's opponents. For one thing, the Defense Department statements did not touch the real issue underlying all the congressional distress and concern about foreign involvements and commitments: the question of control of the FDL. The ability to respond rapidly with significant forces equates to an opportunity for the President to commit this country to a course of action contrary to congressional desires. In a sense, the FDL became the whipping boy for the rapid deployment concept. The control issue rarely came to the surface, but when it did Congress was left no reason to expect the FDL's deployment to be based on anything other than a decision by the President acting as Commander in Chief. This exchange among Representative Joseph P. Addabbo (D., N.Y.); Brig. Gen. H.G. Moore, Deputy Director of Plans, Office, Deputy Chief of Staff for Operation; and Vice Adm. J.B. Colwell, USN, Deputy Chief of Naval Operations (Fleet Operations and Readiness) at the House hearings on the 1970 budget illuminates this point:

> Mr. Addabbo: In other words, throughout the world we could deploy small armed camps ready to be used in any crisis, or placed where there might be a crisis at any time.
>
> General Moore: This decision would be made by appropriate national authorities.
>
> Mr. Addabbo: They [FDL's] could be stationed throughout the world and be put into direct combat at any time at the command of the White House, without any further legislation or any further review by the Congress or anything else, is that correct?
>
> General Moore: Their use would be as directed by appropriate national authorities.
>
> Mr. Addabbo: We would have no control over their deployment. Congress would have no control over the deployment. Once you have these ships in being, they can be deployed. We have control over the bases, but we have no control over these FDL's, is that correct?
>
> Admiral Colwell: I think it is a difference between deployment

and employment, sir. The deployment would presumably be ordered by the Joint Chiefs of Staff as directed by appropriate national authorities. The employment, being after the deployment, would be a matter of national policy.

Mr. Addabbo: The deployment would be by the Joint Chiefs of Staff. The Congress would have no review of where these ships should be or where we should have an armed camp.[59]

The Congressman was obviously concerned about the question of control over the commitment of the ships and their cargo. The response was couched in doctrinal obscurity and doubletalk. It is no wonder that the program failed to win congressional support.

Yet another major objection aimed at the FDL project was its cost. From its inception, Defense officials spoke of an FDL project which would include about 30 ships and cost over a billion dollars. The magnitude of those figures was guaranteed to produce congressional concern about the wisdom of the project.

The cost criticism was clouded by the fact that the cost of FDL's was frequently compared to the cost of other ships, both naval and private. These comparisons rarely took into account, however, the fact that the FDL's "cost" figure, being based on a "total package," included far more than did the costs of other ship programs. On the other hand, critics were also quick to note that by 1968 the Contract Definition process alone had already cost over $17 million before a single ship was laid down. The FDL also appeared expensive because it was envisioned as a multiple-ship, multiple-year construction project. Congress was accustomed to dealing only with the single-year programs which had been used in the past.

Its multiple-year nature also impinged adversely on the FDL in another fashion. Congress was reluctant to authorize an initial installment of FDL's for fear they would then be obliged to continue with the program, possibly an extremely expensive proposition. As Senator Mansfield (D., Mont.) put it, the initial FDL increment was "typical of those foot-in-the-door things" which required careful scrutiny.[60]

In some ways, the cost criticisms applied to the FDL were only a variation on the theme that the FDL would compete with private merchant shipping for available Federal funds. At the same time, however, many of the critics, notably Mr. Ralph E. Casey and Representative Edward A. Garmatz (D., Md.), Chairman of the House Committee on Merchant Marine and Fisheries, interpreted the situation differently. They were convinced that if the funds requested for FDL's were invested in the merchant marine, they would produce a large fleet of fast, modern ships which could perform the FDL's mission and also expand the Nation's private shipping industry. There were many specific proposals to put merchant ships into the FDL's role. Among them were LASH (Lighter-Aboard Ship) and Sea Barge. Both of these concepts employed specially configured vessels which could be preloaded with Army equipment for deployment "when desired" within another, larger, specially designed hull. Another program was prepared by the Committee on American Steamship Lines. Dubbed RESPOND, it envisioned a greatly enlarged merchant fleet, part of which would be allocated to FDL-type missions on a long-term basis.

The Defense Department was quick to point out that each of these proposals had fatal flaws. Experience had shown that it normally takes 30 days to shift merchant vessels from their trade operations to military support missions. They must return to port and offload their civilian cargo. Then, assuming they

Naval War College Review, Vol. 23 [1970], No. 8, Art. 7

are in the proper geographic area and do not have to transit to a loading port, the military cargo must be loaded aboard before they can start their military mission. The FDL was designed to be able to deliver a full stock of organizational equipment and supplies to any littoral in the world in about 14 days, and any program which depended upon merchant ships would inevitably contain the very delays that the FDL songht to avoid.

Attempts to convert the money requested for FDL's into merchant ships which cost only a fraction of the price led to another error. The two types of ship were not comparable. The FDL's were larger, faster, more complex, and equipped with multiple high-speed offloading systems and environmental controls. These features were not present and would not be desirable in a merchant ship which was working normal trade routes. If they were installed, they would make the ship as expensive as an FDL. This upsets the argument that the funds for 30 FDL's could finance a fleet of 150 merchant sbips which would substitnte for the FDL's.

Labor representatives also found beneficial reasons to prefer an expansion of the merchant marine over the building of FDL's. The former course wonld create more than the 1,000-2,000 seagoing jobs which would he established in the FDL's. The new jobs would also he in places where union influencec is greater than it is in the civil servicc maritime servicc.

There were other influences of lesser magnitude working against the FDL. Their precise extent and influencc are extremely difficult to determine with any degree of precision.

One such influence was a fear among Navy supporters such as Representative Mailliard, a rear admiral in the Naval Reservc, that FDL funds wonld bc provided by reducing other Navy ship construction allotments. The FDL was, after all, a support element for an Army requirement; it was budgeted and requested by the Navy only because interservice agreement assigned responsibility for scalift to the Navy. That the Navy did not place the FDL in the same category with its other requests (i.e., nuclear-powered escorts, guided-missile sbips, aircraft carriers) was evident throughout the life of the FDL project. As Admiral Colwell expressed it at the FY 1970 budget hearings, "The Navy's position has been and still is that, while concurring with the concept, funding of the FDL should be in addition to, not at the expense of the Navy's SCN [Shipbuilding and Conversion, Navy] budget. . . ."[61]

Last but not least, the FDL undoubtedly suffered to some extent from personal antagonism directed toward Secretary McNamara and his so-called "Whiz Kid" associates. Many people, both in and out of Government, disliked the management techniques which Mr. McNamara brought to the Defense Department. Others bitterly resented the manner and degree to which he changed the customary way of doing things. Secretary McNamara and his systems analysts were very closely associated with the FDL project, particularly after its selection as the test case for CF/CD and total package procurement. The frequency with which Mr. McNamara's name was linked in a disparaging manner with the FDL reveals the tendency to fight Mr. McNamara by fighting one of his pet projects. Joseph Curran's reference to "floating Edsels"[62] and Senator Daniel Brewster's (D., Md.) description of the FDL as a "monstrous proposal of Mr. McNamara's"[63] are examples of this pattern. As a contemporary magazine saw it, "... some Congressional observers believe a massive struggle for the FDL may be in the making, in which McNamara's enemies in Congress may combine against him no matter what their true attitude toward fast deployment logistic ships as such."[64]

The Defense Department, of course, did not let the FDL die by default. The project manager's team exploited every available opportunity to explain the project, its purposes, and its positive aspects. A paper turned up by some college students conducting a summer research project provides a rare glimpse into this intragovernmental lobbying effort.[65] The paper, which appears to be a working document for internal use in the Navy Department, lists congressional and public actions taken and planned in the effort to muster support for the FDL. Briefings were either planned or proposed for those identified as potential opponents: Congressman Leggett, Senator Russell (also noted as having been briefed by a representative of Lockheed, the company which was building the C-5A in the Senator's State), Congressman Garmatz, the maritime unions, Capt. Lloyd Sheldon, and Congressman Lennon (D., N.C.). Lennon is noted as opposing the FDL and preferring to use the funds for "amphibious ships and the merchant marine." The anonymous authors observed that "Representative Lennon has heard only one side of the story. Briefing required."[66]

These strenuous efforts to clear away the misunderstandings which surrounded the FDL were not enough to bring the project to the production stage. The project was stillborn. It did indeed become, in Senator Russell's terms, "an exercise in futility."[67] The pressures which defeated it can be summarized as follows:

1. Groups within the Navy Department who wanted to preserve the Navy's traditional role in ship design and procurement;

2. Pro-Navy groups who thought FDL development would be pursued at the expense of other vital Navy projects;

3. Merchant marine groups who feared the FDL would deprive their industry of work and thwart its efforts to revitalize itself;

4. Shipping and congressional groups who saw the FDL as an unwelcome competitor to the merchant marine in the struggle for cargo and funds;

5. Economy-seeking groups in Government and industry who believed the FDL's functions could be performed by alternative systems at lower cost;

6. Shipbuilding groups who disapproved of the innovations of procurement which the FDL introduced to the industry and who doubted that the FDL project would be as beneficial to the industry as its proponents promised;

7. Congressional groups who viewed the FDL as a symbol of a rapid deployment system which they found repugnant because it gave the Executive the potential ability to involve the country in "another Vietnam" (i.e., engagement in military operations abroad without full congressional knowledge and consent);

8. Those individuals who opposed Secretary McNamara's policies and techniques and were willing to oppose almost anything he and his staff of systems analysts proposed;

9. The unfortunate accident of timing: the proposal of a massively expensive program while the Government was struggling to control expenses, bolster the economy, and support an ever-growing commitment in Vietnam.

There are two main conclusions to be drawn from the FDL project. Both relate to future military planning. One concerns the specific nature of the FDL program; the other refers to the relationship of political affairs and military strategy.

The FDL project failed because it contained too many innovations. Contract Definition, total package procurement, and shipyard modernization: each aroused opposition. No segment of this opposition was strong enough to defeat the FDL singlehanded, but in combination the opponents were mutually reinforcing. Collectively they

achieved what none could have accomplished alone.

Had the FDL's innovations been distributed among several projects, the ship might well have survived. The new amphibious assault ship (LHA) and a new class of destroyers have successfully implemented the Contract Definition process. The LHA, a new high-speed LST class, and a new class of destroyer escorts have been procured on a multiple-year, series production basis without undue opposition. The LHA also includes most of the "lifetime cost" features of the FDL proposal. The only FDL objective which has not been achieved by a subsequent project is that of shipyard modernization. Even on this score, however, a measure of success has been attained through continuous encouragement toward modernization in shipyards receiving Navy contracts. Newport News Shipbuilding and Drydock Co., one of the builders who declined to participate in the FDL competition, is especially noteworthy for its modernization program.

The FDL's lesson, therefore, is to make haste slowly. As an attempt to induce rapid change, the FDL has come to naught; its less ambitious counterparts have gradually and inconspicuously achieved many of the FDL's goals.

The second lesson to be derived from the FDL project is the inevitable failure of a military strategy which is not built upon a solid foundation of congressional support and understanding. The FDL was misunderstood by many, but its failure to achieve understanding in Congress was fatal. Moreover, the strategic purpose which the FDL was intended to serve lacked congressional approval. The strategy of rapid response, as exemplified by the FDL, directly threatened Congress' role in foreign affairs. The FDL was proposed at a time when the Congress was embarrassingly conscious that it had abdicated its powers and responsibilities in the field of foreign relations. Treading on such sensitivities, the FDL was doomed.

The lesson for military leaders is clear: the Congress must clearly understand and willingly support strategic objectives and their implementing programs before those programs reach an advanced stage of development. Congressional approval of the rapid deployment strategy and the FDL concept should have been obtained when the force structure was in its early planning stages, not when expenditures had passed the $17 million mark and construction contracts were ready to be written.

The FDL's legacy, then, is this. A military strategy which does not enjoy the support and confidence of the Congress is destined to end up in the scrap heap. Military strategy must be consciously adapted to our national political consensus. Only by doing so can we avoid what Senator Russell so aptly described as an exercise in futility.

BIOGRAPHIC SUMMARY

Lt. Comdr. Harold J. Sutphen, U.S. Navy, graduated from Brown University in 1957 with a bachelor's degree in economics, at which time he received his commission from the NROTC program. He has served at sea on destroyers and in the mine forces, including command of an ocean minesweeper from 1967 to 1969. Lieutenant Commander Sutphen holds a master's degree in political science and international affairs, one in law and diplomacy, and also a doctorate in American diplomatic history from Tufts University. He is a recent graduate of the Army Command and General Staff College at Fort Leavenworth, Kans., and is currently serving in the Office of the Chief of Naval Operations.

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