in the formation and training of an adequate Naval Aviation Reserve.

III. Gathering Steam, The 1930s

Fiscal Year 1931 saw the greatest improvement and progress made by the Naval Air Reserve in any single year since its reorganization in 1923. The morale was high and active enthusiasm was displayed by all units. Three factors were largely responsible for the advances that were made: procurement and delivery of service type aircraft; systematic and progressive methods of training for commissioned and enlisted personnel; and competition between units and bases for efficiency ratings resulting from inspections by the Naval Reserve Inspection Board.

Marine Corps Air Reserve squadrons were organized in those localities where the Naval Reserve air bases were located. During this year, 26,381 hours were flown by reserve activities. In addition, NAS Pensacola accumulated 10,018 hours in the instruction of reserve students for qualification and designation as Naval Aviators. No fatalities occurred during this period.

In FY 32, a standard list of machinery and tool equipment was authorized, and 32,500 hours were flown. The progress made by Naval and Marine Corps Reserve Aviation continued and the enthusiasm of the previous year was maintained by all units. The Naval Reserve Inspection Board paid the highest compliment considered possible to Naval Reserve Aviation when it stated in the annual report that Naval Reserve aviators were ready for mobilization duties and that the Naval Aviation Reserve was a very efficient organization.

During this period, many organized volunteer drills were held in addition to the pay drills allocated. These additional periods were required to provide adequate ground and flight training. Flying fields at Squantum and Great Lakes were improved and enlarged to permit night flight training, and New York, St. Louis and Minneapolis accomplished major overhaul of their aircraft for the first time. Many of the bases were also called upon to assist in many extracurricular activities, such as photographic expeditions, search and rescue, mosquito abatement flights, and lighter-than-air operations.

The inspection board in 1932 also stated that the high state of efficiency was made possible by the method of selection of personnel, advanced flight training at Pensacola and active duty in the fleet. Total flight time for this year was 30,337 hours.

In the next two years, funds were drastically reduced and operations and syllabus flying suffered accordingly. The inspection board expressed the opinion that the reduced flight syllabus, which was less than 45 hours per pilot, was inadequate to maintain the proficiency of Naval Reserve aviators.

For the first time, all aviation bases accomplished complete major overhaul of aircraft and engines. Various federal relief administration agencies assisted materially in improving reserve flying fields. The inspection board held examinations of officers in navigation and radio and of all rated men in their respective ratings. Due to the drastic reduction in available funds, only 20,779 hours were flown during this year.

A Transitional Period

In 1934, the Naval Reserve was made up of three major classes: the Fleet Naval Reserve, the Merchant Marine Naval Reserve, and the Volunteer Naval Reserve. The first and third of these classes included aviation personnel.

The Fleet Naval Reserve consisted of officers and men in training or qualified for combat duty. The aviation group was organized into squadrons composed of definite numbers of officers and men. According to law, this class was expected to perform 15 days' active or training duty, with pay and allowances each year, and a stipulated number of regular drills during the year for each organization. The necessary training planes and equipment were assembled at Naval Reserve aviation bases in the custody of a small number of officers and men on year-round duty. There were 13 such bases in 1934 at which the Marine Corps as well as the Navy aviation reserve units received training. The designation of aviation officers in the Fleet Reserve was A-F (aviation flight officers) and, as of September 30, 1934, there were 257 who carried this designation. Enlisted men in the Fleet Reserve did not have a specific designation denoting aviation duty.

The Volunteer Naval Reserve was composed of officers and men available for detail in the event of war in accordance with their individual qualifications. Drills and training duty were voluntary, but no compensation was paid for such duty. There were two main subdivisions of the Volunteer Naval Reserve: those individuals qualified for combat duty, in a degree similar to the Fleet Naval Reserve, and designated for general service (G); and those individuals available for specific technical and specialist duties, designated as specialists (S). The first group included reserve officers who served in WW I, former Navy officers and men, and Naval Aviators. All of these were eligible for organizations of the Fleet Naval Reserve, but lack of vacancies and residence at a distance from the location of the reserve unit prevented membership in the Fleet Reserve for this group.

The specialists included engineers of all types, lawyers, medical personnel, etc. Officers of the Volunteer Reserve available for general aviation service were designated A-V(G), aviation officers. There were 142 enrolled as of September 30, 1934. Aviation officers available for special service were designated: A-V(K), aviation ground officers; A-V(S), aviation officers; and A-V(T), aviation transport pilots. As of September 30, 1934, there were respectively 22, 109, and 55 officers enrolled in these categories.

Enlisted personnel in the Volunteer Reserve were likewise divided into classes. There were two aviation categories: V-2, volunteers associated with aviation organizations; and V-5. Naval Reserve Student Naval Aviation Pilots. The numerical strength of these two categories on September 30, 1934, was 345 and 17, respectively.

The mission of the Naval Reserve was "to procure, organize and train the officers and men necessary in the event of war." For planning purposes, it was considered that the forces of the Naval Reserve should be adequate to supplement the regular Navy to carry on for the first 120 days of any possible war. It was estimated that, after the first 120 days, training stations and special schools could turn out the numbers

The NY series training planes were two-seat, convertible land or sea aircraft that stressed simplicity but ruggedness. The Navy purchased 186 NY-2s in 1929, 35 of which went to the reserves.

required to continue the war.

The Aviation Cadet Program

The Federal Aviation Commission, which was appointed in 1934, in accordance with an act of Congress to study and make recommendations of all phases of aviation in the United States, included in its report comments on aviation in the Naval Reserve. The Commission's Recommendation No. 54 called for a substantial strengthening of the aviation reserve of the Navy (and the Army), and for that purpose recommended that a higher priority in the allotment of funds be awarded those activities. The recommendation continued:

"In war against a major power, our air forces would feel an almost instant need for the mobilization of at least twice, and in the Army probably at least three or four times, their regular personnel. The numbers immediately mobilized in full readiness for duty would have to be backed up, in order that military effort could be carried on, by a Reserve of some additional thousands of qualified pilots who could be made ready for full service within a few weeks. As we have studied the present status of the Reserves, it has seemed to us that this problem has been faced on so small a scale as scarcely to constitute more than a working model. The Navy has a total enrolled Reserve of 481 officer pilots, of whom 251 could be considered as ready for immediate duty....

"In establishing priorities in a Reserve force, we take it as self-evident that the most urgent concern must be with the first-line group that stands ready to step directly into tactical organizations on the day of a declaration of war. The Navy has what seems to us an admirable organization of such a reserve in its 31 Fleet Reserve Squadrons, numbering 851 officer pilots, and organized to fly as a unit for some 45 hours a year in the fulfillment of a syllabus of military exercises drawn up by the Navy Department and to put in a substantial amount of additional practice under the direction of the unit commander. These organizations seem to be close to the ideal of military readiness, as do the nine squadrons of the Marine Reserve which are similarly organized, but their numbers are far inferior to any possible wartime need for immediate services. The specific need here seems to be for additional funds for Reserve purposes.

"...it seems to us conservative to say that the aggregate of effective air force Reserves should be at least double what it is now."

The emphasis of the above

In the thirties, the SU scout aircraft served in various utility roles with fleet and reserve units.

recommendation by the Federal Aviation Commission was based on the need for increasing the numerical strength of reserve aviation personnel. As far as future numerical strength was concerned, it appeared in 1935 that the Aviation Cadet Program would furnish Naval Reserve Aviation with adequate officer personnel. This would take place, it was estimated, through the commissioning of aviation cadets in the Naval or Marine Corps Reserve at the completion of their tours of active duty, and their assignment to reserve squadrons.

One justification of the Aviation Cadet Program was to build up the future strength of the aviation reserves. Apparently, with this possibility in mind, Navy Department spokesmen presenting the estimates for Naval Reserve appropriations to the House Appropriations Committee for FYs 36 through 39 did not express great concern over the numbers enrolled in the Naval Reserve forces. In March 1935, Lieutenant W. G. Tomlinson, who was introduced as an aviation officer directly identified with Naval and Marine Corps aviation, told the House Appropriations Committee:

"The aviation cadet bill, if enacted, and if funds are provided to carry it out in accordance with the proposal of the Naval Department, will in time build Naval Reserve Aviation up to adequate numbers, and that will take care of the officer phase of it. If given proper authority, we can recruit enlisted men locally at the Reserve bases, enlist them, and train them so that they will be in a position to satisfactorily carry out their duties."

Briefly, the Aviation Cadet Program provided for the selection of young men to be appointed by the Secretary of the Navy to the grade of Aviation Cadet in the Naval and Marine Corps Reserve. The appointment was contingent upon the appointee's signing an agreement to serve on active duty for four years, unless he was released sooner. Upon completion of the four years of active, the aviation cadet was eligible for a reserve commission.

The cadets were issued uniforms and equipment and were to be paid $75 per month during flight training and $125 per month while on active sea duty, plus a subsistence allowance of one dollar per day. A uniform allowance of $150 was to be paid on assignment to sea duty. In addition, during their period of active duty, the aviation cadets were issued a government life insurance policy of $10,000, with the premiums paid by the Navy.

The Aviation Cadet Program was passed by Congress and approved by the President in April 1935. The first class of 55 cadets reported to Pensacola on July 20, 1935, and by September, there were 192 aviation cadets undergoing training, with an additional 201 potential cadets undergoing elimination training to determine their adaptability to flight before going to Pensacola.

By September 1936, the first cadets were at sea and, two years later, 614 aviation cadets were on active Naval Aviator duty.

The Aviation Cadet Act of 1935 was designed to furnish the Navy with additional Naval Aviators sufficient for

the peacetime operation of the fleet. until such time as regular Navy personnel became available. It was also intended to strengthen the Naval Reserve by the addition of a group of qualified Naval Aviators. The projection was that the requirements of 1941 would be met with approximately 721 cadets on duty. From that year forward, their numbers would decrease until they eventually disappeared.

This concept of the Aviation Cadet Program's intent was held at high levels throughout the Navy Department, except for a few intrepid souls who saw the program's possibilities. A letter of April 27, 1936, from the Chief, Bureau of Aeronautics to the Chief, Bureau of Navigation stated:

"Another and more general conclusion is that there is little prospect of meeting Naval Aviator requirements from regular service sources. and that we must accept the Aviation Cadet as a permanent fixture and expect them to compose 45 percent of the Naval Aviators, unless some remedial action can be taken."

Gradually, acceptance of the Aviation Cadet Program as a permanent source of supply began to spread. Indeed, despite some legislative maneuvering to change aspects of the Cadet Act, and grumblings from the regulars, it was becoming obvious that to release the cadets approaching the termination of their sea duty period woulds seriously hamper the fleet. One admiral wrote:

"As the time draws near to release a number of cadets from active service, the pressure to retain and commission them in the regular service will become acute. This question will undoubtedly raise that of a separate air corps, in which cadets might expect permanent commissions and advancement. In order to anticipate such suggestions and provide an incentive for professional excellence, it is believed that a very limited number should be commissioned regular ensigns each year."

However, with all of the extensive correspondence over a three-year period, the Aviation Cadet Program remained relatively unchanged.

The appropriations hearings indicate that a problem of somewhat greater concern to the Navy Department than the numerical strength of the aviation reserve was the maintenance of an annual training program of sufficient extent to keep the reserve forces at satisfactory levels of efficiency. The extent of the reserve training program was determined each year by the size of the appropriation made for that purpose.

During FY 34, it was necessary to reduce the number of flying hours per officer from a total of 45 to a total of approximately 30; the number of drills from 48 to 24; and to eliminate training for flying officers of the Volunteer Reserve altogether. It was also "necesssary to reduce the personnel on full-time duty at the various Naval Reserve aviation bases. This curtailment in the training program was forced by considerations of economy. Although Congress had appropriated sufficient funds to finance the training program recommended by the Department, the Director of the Budget limited expeditures for the Naval Reserve to approximately two-thirds of the amount appropriated.

In presenting estimates for FY 35 to Congress, representatives of the Bureaus of Navigation and Aeronautics who were concerned with the activities of the Naval Reserve pointed out that the necessary reductions in training during FY 34 had jeopardized the efficiency of the Reserve forces. It was pointed out that a reduction of allowed flying time below approximately 48 hours per year increased the risk of accidents through a decline in flying proficiency.

The failure to provide flight training for flyers of the Volunteer Reserve was likewise a serious matter. Most of these officers were Pensacola graduates who were not attached to a Fleet Reserve squadron, largely because of their place of residence. It was pointed out that if officers of this group were not provided with flight training from time to time, they would soon cease to be Naval Aviators. This situation, if it should develop, would not only interfere with mobilization plans, but would result in a loss of the Navy's investment in the training of these officers.

During FY 35, sufficient funds were appropriated to increase the number of drills for the aviation units of the Fleet Reserve to 36, from the 22 which had been held during the previous fiscal year. Apparently, additional funds became available during the year since a summary of Naval Reserve activities submitted to Congress at a later date indicates that 48 drills were actually held. In addition, it was possible to increase the number of flight hours per officer to 45 from the FY 34 level of approximately 30. However, no flight training was given to members of the Volunteer Reserve because of a lack of funds.

In FY 36, there was a considerable increase in the number of Fleet Reserve officers on permanent active duty. These officers were called to active duty to serve as instructors in the Aviation Cadet Program. According to the FY 36 report of the Chief of the Bureau of Aeronautics, this diversion of Fleet Reserve officers to active duty positions made it possible to provide 14-day training periods for a considerable number of volunteer aviation reserve officers who previously had been deprived of this training due to lack of funds. There was no significant expansion in the training program for the aviation reserve during FYs 37 and 38. During the latter year, however, funds were available for training with pay for a fraction of the Volunteer Reserve. The training quota was 425 officers and 1,066 men, of which the Volunteer Reserve was allotted 125 officers and 300 men. The Fleet Reserve was likewise benefitted to some degree during these two years. The total number of enlisted personnel attached to the Fleet Reserve aviation squadrons was increased from approximately 500 in FY 36 to 713 in FY 37, and to approximately 1,000 the following year.

During 1935 to 1938, there was considerable discussion of a legislative amendment to the Naval Reserve Act of 1925 under which the Naval Reserve continued to function. A Navy Department draft of a new Naval Reserve law was prepared in the latter part of 1936 by a conference of regular and reserve officers, but failed approval by the Director of the Budget in March 1937. The bill was later redrafted and was approved by Congress and the President on June 25, 1938. It was known as the Naval Reserve Act of 1938.

This act contained little or no language exclusively applicable to the aviation components of the reserve forces. However, some of the provisions of general application were of significance

to the Naval Aviation Reserve. The more significant of these were: the Fleet Reserve was to be composed only of personnel transferred from the regular Navy to the Naval Reserve; the actively drilling components of the existing Fleet Reserve were transferred to a new category, the Organized Reserve. Flying officers formerly designated A-F were to be classified as A-O; and the act stated that the maximum numerical strength of the reserve as determined by the Secretary of the Navy should be reached within a 10-year period, as nearly as possible by equal annual increments. This objective was made subject to annual appropriations approved by Congress.

During the hearings on the appropriation bill for FY 40, reference was made to the intended expansion of the Naval Reserve as stated in the Naval Reserve Act of 1938. Captain Gygax, then in charge of reserve matters in the Bureau of Navigation, made the statement that the estimate presented to the committee was entirely inadequate to accomplish the first step in the announced intention of reaching maximum strength of the reserve in a 10-year period. When asked why, he replied, "The budget prepared by...the Bureau of Navigation did contemplate a reasonable first step in that direction but budgetary consideration, both in the Navy Department and in the Bureau of the Budget, reduced this estimate to what we have here."

As in earlier years, funds for the training of the Volunteer Reserve were least adequate. Capt. Gygax stated that the estimates submitted would provide a two-week training period each year for only one out of 25 officers enrolled in the Volunteer Reserve. In other words, only one training period every 25 years could be provided for each individual. The Navy's goal at the time was sufficient funds for a training period every four years. Some members of the committee appeared sympathetic to the need for additional training of the Volunteer Reserve, but did not see fit to recommend an increase in the budget estimates for this purpose. The Chief of the Bureau of Navigation indicated in his FY 39 report that, through savings on other portions of the appropriation, it had been possible to extend some training to approximately one-twelfth of the Volunteer Reserve officers during that fiscal year.

The same annual report also raised the problem of a shortage of qualified pilots in the reserve aviation squadrons. It was stated that this shortage had "long been a matter of concern to the Bureau." Since all individuals enrolled in the Naval Reserve for flight training after July 1, 1935, had been a part of the Aviation Cadet Program, no new officer personnel had been added to the reserve squadrons. In addition, since 89 of the 227 officers of the Organized Reserve (Fleet Reserve prior to the Naval Reserve Act of 1938) were on active training duty in connection with the Aviation Cadet Program, only 138 were available for mobilization. It has already been pointed out that the problem of inadequate enrollment in the aviation reserves was not stressed in appropriation hearings. The lack of emphasis on shortages of reserve personnel was in part the result of a belief that the Aviation Cadet Program would provide an ample supply of reserve officers in the future. It was probably due to the fact that in view of the limited training program permitted by available funds, an increase in the numbers enrolled in the reserve would serve no useful purpose. Therefore, the need for expanding the training of those already enrolled was stressed in the discussion of appropriations for the maintenance of the Naval Reserve.

There are indications, however, that a shortage of reserves in aviation was a matter of concern within the Navy, notwithstanding the representations made to the House Appropriations Committee. In a secret memorandum to the Chief of the Bureau of Aeronautics dated December 10, 1935, the Plans Division of the Bureau indicated its belief that the progress of the campaign in an

"orange war" was entirely dependent upon the number of pilots in the Naval Aviation Reserve rather than upon the production of aircraft. The minimum number of reserve officers needed to meet mobilization requirements was 7,453. The magnitude of the expansion required by this estimate is emphasized by the fact that as of September 30, 1935, there were only 631 reserve officers enrolled in the various aviation categories.

The Plans Division memorandum recognized the difficulties of securing sufficient funds for the desired expansion and training, but recommended that the Navy present to Congress a definite seven-year program for reaching the minimum personnel goals by 1942, and concluded with the statement, "If Naval Aviation is to carry out the task assigned to it in an orange campaign, steps should be taken immediately to remedy the critical Naval Aviation Reserve situation."

The Flight Division of BuAer expressed approval of the conclusions reached by the Plans Division relative to reserve personnel and recommended that proposals for expansion of the Naval Reserve be submitted to the Bureau of Navigation and the Chief of Naval Operations. The suggestion was also made that reserve pilots probably could be obtained and trained in the same manner as aviation cadets,

In the annual estimate for FY 38 prepared by the Chief of Naval Operations in 1936, the requirements for the Naval Aviation Reserve included the following references to expansion of the reserve forces: "Provision should be made to expand the Aviation Cadet training to ensure the graduation of 500 from Pensacola yearly; to increase the enrollment of AVT (sic) pilots; to arrange a system of certifying qualifications for naval training of civilian pilots and issue such certificates in exchange for promise to join the Navy for training at Pensacola; and to extend the enrollment of civilian personnel in the aviation enlisted classification."

In preparing budget estimates within the Navy Department, provision was made for an expansion of the aviation cadet training program intended to result in the training of 500 aviation cadets annually for four years. However, financial obstacles were encountered in the fall of 1936. The Director of the Budget requested a total reduction of $75 million in the Navy Department estimate. In response to a request from the Chief of Naval Operations for comment on the possibility of reductions in bureau programs, BuAer voluntarily suggested the elimination of funds for expansion of facilities at Pensacola and for additional aircraft to accommodate the expanded Aviation Cadet Program. The Bureau pointed out that the expansion in the program was designed to produce a "reserve of reserves." Such surplus was to build up reserve aviation squadrons in the event of mobilization. BuAer indicated that it would prefer to postpone this expansion in the Aviation Cadet Program in preference to other budget reductions affecting its programs. BuAer's suggestion was apparently accepted, and it resulted in further delay in attaining the desired number of Pensacola-trained pilots in the reserves.

In spite of the need for augmenting aviation reserve personnel to meet mobilization requirements, the Aviation Cadet Program continued to be limited to numbers sufficient to supply the current needs of the regular Navy. The consequences of this situation were reviewed again by the Bureau of Navigation in a letter to BuAer in March 1939, which stated that the contemplated active duty utilization of

The FF-1 was a two-seat, carrier-based fighter that was flown by the Naval Air Reserve beginning in 1936.

aviation cadets who had completed their required periods of service would impose an additional limitation on the growth of a reserve for mobilization purposes. As a result of this situation, "...the estimated annual increase of such a reserve for emergency is so small that it now appears to be impossible to ever meet mobilization needs with the program as at present constructed."

After pointing out that the Naval Reserve Act of 1938 required plans be made to bring the reserve to desired strength of qualified and trained personnel within a 10-year period, the Bureau concluded, "...the present and proposed aviation cadet programs do not appear to meet the requirements of this provision of law. It thus appears necessary to revise the concept upon which the Aviation Cadet Program is based or to establish some other means to create such a reserve."

The Bureau of Aeronautics agreed that immediate action to remedy the deficiency in reserve personnel should be taken. Its letter also pointed out that the Naval Aviation Reserve Act of 1939 in conjunction with the Naval Reserve Act of 1938 contemplated a reserve of 6,000 reserve Naval Aviators by July 1, 1948, whereas Bureau estimates indicated that under the existing program there would be 1,548 Naval Aviators in the reserve on that date.

Two recommendations were made by BuAer. The first requested authorization to increase the number of aviation cadets entering Pensacola during FYs 40 and 41 to 350 cadets beyond estimated fleet needs. The second recommendation called for a study of all phases of aviation personnel. An attempt was made by BuNav to secure funds for an increase in the number of aviation cadets entering Pensacola during FY 40, but the increase was disallowed by the Bureau of the Budget. However, BuNav recommended to the Chief of Naval Operations a substantial increase in aviation cadet training for FY 41.

Other sources of aviator personnel to augment reserve squadrons were likewise considered during the spring of 1939. One proposal called for commissioning private pilots and commercial pilots not employed on airlines or similar essential employment in the Naval Reserve; providing training for these individuals at Naval Reserve aviation bases while on inactive duty; and then their incorporation into reserve squadrons as Naval Aviators.

This plan was sponsored by Congressman Maas of the House Naval Affairs Committee who was concerned over the shortages in reserve personnel. Congressman Maas presented his plan at a meeting of the Naval Reserve Policy Board, and also at hearings on the Naval Aviation Reserve Act of 1939. On the latter occasion, Mr. Maas expressed the belief that the majority of aviation cadets completing their required term of duty would accept jobs in commercial aviation and would not be available as aviators in the reserve squadrons. The Bureau of Aeronautics was likewise aware of the possibility that aviation cadets might seek opportunities to transfer to the Army Air Forces because of the greater possibilities of a permanent career offered by that service.

In spite of the serious actual and potential deficiencies in reserve personnel, the Maas plan did not receive strong support within the Bureau of Aeronautics. Opposition to the plan declared it an unwise reduction in standards heretofore maintained for the Naval Aviator designation. The majority took the position that, regardless of private flight experience, only an Intensive course in Naval Aviation such as that provided at Pensacola could produce a Naval Aviator acceptable to the fleet. However, no official action was taken on the plan, and apparently no official position was taken by the Bureau of Aeronautics prior to the end of FY 39.

The mission of the Naval Reserve was, as previously stated, to provide a trained force of officers and men immediately available for duty with the Navy in the event of war. This force should be of sufficient numbers to meet the Navy's needs until such time as schools and training stations, established at the outbreak of war, could begin to supply trained personnel for the continuation of the war. The foregoing account of developments during the years 1934 to mid-1939 indicates that at the end of the period under discussion. the Naval Aviation Reserve was clearly not in a position to fulfill its assigned mission.

While it appeared that the efficiency of the squadrons of the Organized Reserve was high and that they were, in general. prepared for speedy mobilization, the number of aviators enrolled was totally inadequate as compared with estimated mobilization requirements. Against a mobilization requirement in April 1939 of 2,905 reserve Naval Aviators of classes A-O and A-V(G), and subject to upward revision within the three months following, there were 226 A-O officers and 118 A-V(G) officers enrolled as of June 20, 1939. Since the A-V(G) officers were not regularly attached to reserve squadrons, they had in many cases received a minimum of training from year to year. The several classes of the Volunteer Reserve received little or no training during this period. It should be remembered, however, that the aviation cadets constituted a group in the Naval Reserve, and that the program was financed from Naval Reserve appropriations. Thus, the creation and development of the Aviation Cadet Program may be regarded as a significant expansion in the Naval Aviation Reserve.

On the other hand, the expanding aeronautical organization absorbed all of the cadets which could be trained during the period to meet the requirements of the peacetime regular Navy for aviators. Consequently, the Aviation Cadet Program failed to augment the reserve squadrons, which was its original intent; and the prospects of significant expansion in the reserve squadrons from this source in the future were somewhat dim in the spring of 1939.

The appropriations made available by Congress were the limiting factor on the activities of the Naval Reserve. However, although Congress failed to increase substantially the funds available for the Naval Reserve over the estimate submitted by the Navy Department for each fiscal year, in no case during FYs 35 through 40 did Congress significantly reduce the Naval Reserve appropriation, at least that portion earmarked for aviation. It appears that limitations on the funds available for the use of the Naval Reserve were imposed at earlier stages in the preparation of the annual estimates, either in the Navy Department or in the Bureau of the Budget.

The draft of a bill which embodied changes in the Aviation Cadet Act was requested by BuNav and was prepared by the Judge Advocate General and forwarded to Congress and the Chief of BuNav on April 11, 1939. The bill became known as the Naval Aviation Reserve Act

of 1939, and embodied several significant changes in the Aviation Cadet Act of 1935:

Aviation cadets, if qualified after completion of training, could be commissioned as ensigns in the Naval Reserve or second lieutenants in the Marine Corps Reserve.

Promotions to the next higher rank after three years of active duty excluding the year of training were authorized, subject to qualification by examination.

Following cadet training, the individual could remain on active duty up to seven years.

The lump sum bonus of $1,500 was reduced to $500 payable upon release from active duty of four years or more. The increase in pay received as an ensign would offset the reductions in the bonus.

Aviation cadets serving in the Fleet were to be commissioned immediately and given the option of retaining the old pay with the $1,500 bonus, or accepting ensign's pay and the new $500 reduced bonus.

The basic provisions duplicated those applying to the Army's flying cadets. The hearings on the bill were low-key, and the bill was passed by Congress and approved by President Roosevelt on June 13, 1939. Concurrent with the bill's passage, the Navy Department established a new administrative classification for the officers to be appointed under its provisions. The request for such classificaton was made by BuNav in anticipation of the passage of the act. The Bureau established a new volunteer class of commissioned officers of the Naval Reserve to be known as Class A-V(N). The composition of the new class consisted of "...naval aviators and ex-aviation cadets serving on active duty to meet fleet needs, as distinguished from reserve officers on active duty for their own training or in connection with the instruction, training and drilling of the Naval Reserve."

Thus, within four years of its incpetion, the Aviation Cadet Program was strengthened by improving the status of the individuals concerned. Originally conceived as a temporary measure, the program had proven itself successful and had become an important source of aviation personnel. Just how important would become crystal clear in the frantic years of the early 1940s during the WW II. Without the cadre of aviation cadet alumni, most of which were immediately commissioned after Pearl Harbor, U.S. Naval Aviation would have been even harder pressed to meet its commitments while the country geared up for production of men and machines.

IV. World War II, The Big Test

Even though the acts of 1935 and 1939 went a long way in creating a viable reserve aviation force in the Navy, there was still much to be done. By the time the Japanese attacked Navy facilities at Pearl Harbor on December 7, 1941, and the Philippines on December 8 and 9, catapulting the U.S. into WW II, the reserve resources still left much to be desired.

World War II was to prove again the ability of Americans to adapt themselves in war. Instead of a "trained and ready reserve," the Navy had only a relative handful of trained men ready to step in and help the regular forces in the opening days of the war. Of the thousands of trained aviators, only 600 were available immediately, and there were only 700 enlisted reserves ready. During the war, aviation training in the Navy involved more than 54,000 aviators and hundreds of thousands of enlisted men. The number of trained reserves grew in a

Carrier flight deck personnel prepare to tie down an F4U Corsair of reserve squadron VF-884, while off-duty shipmates take a break in the sun.

four-year period to a number which staggered the imagination. For example, from 1935 to 1940, only 1,800 aviation cadets had been trained. In 1941, the input jumped to 7,000 and, by the end of 1943, the rate soared to 20,000 per year — an increase of nearly 300 percent!

By the end of 1944, there were more than 55,000 trained Naval Aviators plus a similar number of aviation specialists and general service officers on active duty in aviation duties. At the end of the war, in August 1945, 83 percent of the Navy's fleet manpower consisted of reserves.

The tremendous training effort involved opening several major bases, including New Orleans, Atlanta and Dallas. In November, 1940, one-third of the Navy's reserve aviation squadrons had been mobilized, and full mobilization of the Naval Air Reserve was accomplished by January 1941. NRAB Squantum began training aviators from all allied countries, as well as Navy personnel. Flight training was conducted as was antiaircraft training in the marshes around the station. Outlying fields in Beverly and Ayer, north of Boston, served as bombing and gunnery training facilities.

One of the legendary figures in the history of NRAB Squantum was Commander John Shea from Boston. Commissioned a reserve-ensign at the close of WW I, Shea returned to civilian life and joined the Aviation Reserve Division at NRAB Squantum. He eventually became executive officer of Squantum in 1931 and remained there until 1940. Like thousands of other fellow reservists, Cdr. Shea was recalled to active duty in 1940, reporting aboard USS *Wasp* as air operations officer. *Wasp* was destined to see a great deal of action after Pearl Harbor, serving as fighting companion with the few American carriers operational in the Pacific after Pearl Harbor. The responsibility fell to this small band of forward-based ships to face the seemingly invincible Japanese juggernaut and halt the enemy drive.

While supporting the U.S. invasion of Guadacanal in the late summer of 1942, *Wasp* was sunk on September 15, and Cdr. Shea was reported "missing in action." Shea was well-known throughout his command as a hard worker, but his fame in the "outside" world came through a letter which he wrote to his five-year-old son, Jackie, just before he sailed in *Wasp.* Dated June 29, 1942, Shea's letter has become a classic and is reproduced here.

"Dear Jackie:

This is the first letter I have written directly to my little son. I am thrilled to know you can read it all by yourself. If you miss some of the words it will be because I do not write very plainly. Mother will help you in that case, I am sure.

"I was certainly glad to hear your voice over the long distance telephone. It sounded as though I were right in the living room with you. You sounded as though you missed your daddy very much. I miss you, too, more than anyone will ever know. It is too bad this war could not have been delayed a few more years so that I could grow up again with you and

The distinctive gull-wing design of Vought's F4U Corsairs is unmistakable as silhouettes in the predawn sky over USS Sicily (CVE -118) in 1950. An earlier version of the aircraft, the FG-1D, was a mainstay in the reserves in the late 1940s.

do all the things l planned to do when you were old enough to go to school.

"I thought how nice it would be to come home early in the afternoon and play ball with you and go mountain climbing and see the trees and brooks, and learn all about woodcraft, hunting, fishing, swimming and other things like that. I suppose we must be brave and put these things off now for a while.

"When you are a little bigger you will know why your daddy is not home so much any more. You know we have a big country and we have ideas as to how people should live and enjoy the riches of it and how each is born with equal rights to life, freedom and the pursuit of happiness. Unfortunately there are some countries in the world where they do not have these ideas, where a boy cannot grow up to be what he wants to be with no limit on his opportunities to be a great man such as a great priest, statesman. doctor, soldier, businessman, etc.

"Because there are people in countries who want to change our nation, its ideals, its form of government and way of life, we must leave our homes and families to fight. Fighting for the defense of our country. ideals, homes and honor is an honor and a duty which your daddy has to do before he can come home and settle down with you and mother. When it is done he is coming home to be with you always and forever. So wait just a little while longer. I am afraid it will be more than the two weeks you told me on the phone.

"In the meantime take good care of mother, be a good boy and grow up to be a good young man. Study hard when you go to school. Be a leader in everything good in life. Be a good Catholic and you can't help being a good American. Play fair always. Strive to win but if you lose. lose like a gentlemen and a good sportsman.

"Don't ever be a quitter, either in sports or in your business or profession when you grow up. Get all the education you can. Stay close to Mother and follow her advice. Obey her in everything, no matter how you may at times disagree. She knows what is best and will never let you down or lead you away from the right and honorable things of life.

"If I don't get back, you will have to be Mother's protector because you will be the only one she has. You must grow up to take my place as well as your own in her life and heart.

"Love your grandmother and grandad as long as they live. They, too, will never let you down. Love your aunts and see them as often as you can. Last of all, don't ever forget your daddy. Pray for him to come back and, if it is God's will that he does not, be the kind of a boy and man your daddy wants you to be.

"Kiss Mother for me every night. Goodbye for now.

"With all my love and devotion for Mother and you.

Your Daddy"

LINE SPACE

While perhaps a bit maudlin for readers 45 years later, Shea's letter was typical of similar pieces of correspondence many fathers wrote to their families showing the emotions of being separated and going into battle.

The letter also gives a goad feeling for the commitment many reservists felt during their period of active service. The airfield at NAS South Weymouth, descendant of NRAB Squantum, is named in honor of Jack Shea.

NAS Anacostia, in Washington, D.C., also contributed to the war effort. New buildings were constructed and in 1942, and the Photographic Science Laboratory, now known as the Naval Imaging Command, moved into its new $4 million facilities. A new aviation unit, the Aircraft Experimental and Development Squadron, was formed and based at Anacostia. Its function was to experiment with aerial tactics. During 1943, the Tactical Air Intelligence Center moved from Philadelphia to Anacostia to evaluate captured Japanese equipment.

The WAVES — Women Accepted for Voluntary Enlisted Service — first came to Anacostia in January 1943, and various other administrative and developmental facilities took up residence there as well.

World War II provided the first chance in 20 years for complete integration of the reserve forces. Certainly the overwhelming victory over the axis powers — Japan, Germany and Italy — could not have been obtained without the huge influx of ready reservists, those men already in the reserves in 1941, and the drafted and volunteer reserve personnel who came in after the declaration of war following Pearl Harbor. (There was a measure of friction between the hardened regulars, particularly at the senior levels, who occasionally made little attempt to hide their contempt for "those reservists." And the feeling was sometimes reciprocated by the reservists. But, on the grander scale, the complete integration of the reserves with the regular forces provided this country with the means to completely defeat the enemy. There could have been no other way.

V. Postwar Activities and Korea, The Reserve Show

After the stunningly complete victory of the Allies in 1945, the winners tried to return to prewar simplicity. War-weary Britain battled with the desires of its population to supply food and clothing. The U.S., while trying to maintain the momentum of the wartime boom economy, was beginning to realize its new role as leader of the free world against the Soviet monolith. And the battered countries of Europe's mainland tried to rebuild. Most of Asia was in ruins, lifeless. It was a hard world immediately following the devastating global war and victory by one side, complete as it was, did not bring a commensurate promise of relief for anyone.

Finally understanding its new found dominance, the U.S. also understood that it would not allow its military forces to completely wind down. Although severe cuts in military spending and construction programs did occur, one area which was addressed was the maintenance of the reserve forces, including the Naval Air Reserve.

The post war plans officers decided that loss of trained reserves would be wasteful and the Naval Air Reserve Training Command was established as the instrument to continue to utilize the manpower in the reserves. Headquarters for the command was established at NAS Glenview, Ill., in November 1945, with formal commissioning ceremonies in July 1946. Rear Admiral F. D. Wagner became the first Chief, Naval Air Reserve Training (CNAResTra) on November 1, 1945. From his headquarters in Glenview, CNAResTra could control the thousands of naval air reservists throughout the country. Rear Admiral E. C. Ewen took over from RAdm. Wagner in December 1945 and. together with Brigadier General C. B. Schilt — Medal of Honor winner in Nicaragua in 1928 — built the joint resources of the Navy and Marine Corps Air Reserves.

Launching the admittedly ambitious air