

AN ORDNANCE BASE SHOP FOR THE AFP

By Lieutenant Colonel BLAS A. ALEJANDRE

IN 1947 General Calixto Duque, who was then Deputy Chief of Staff of the Philippine Army, directed the PA Reorganization Board composed of Majors Manuel Q. Salientes, Blas A. Alejandre, and Conrado B. Rigor to look into the possibility of establishing an Ordnance Base Shop as part of the plans for the reorganization of the Army. With this as a beginning, successive groups of officers made progressive studies on the establishment of such a shop. Hand in hand with this planning, the training of ordnance officers and EM was also so slanted and guided to take care of every phase of the possible operations of this proposed establishment. Today, six years since they were started, the planning and training work are about to culminate in the establishment of a combined AFP Ordnance-Engineer Base Shop.

With the advice and guidance of our American military advisers, a joint JUSMAG-AFP Team composed of Col Paul Hamilton, Lt Cbl P E Dusault and Lt Col, W A Stanford from the JUSMAG; and Col Nicanor S Velarde, D-C/S; Col Antonio P Chanco, C, CE; and Lt Col Blas A Alejandre, C, O&CS; of the AFP were sent last June to Tokyo, Japan to submit the finished plans for the proposed shops for a final scrutiny at Headquarters Armed Forces of the Far East (AFFE) and to seek the expert advice (on the plans) of AFFE staff officers who have had experience in the construction and operation of Ordnance and Engineer Shops in connection with their work in the former Japan Logistics Command (JLC). (The JLC was established

by Gen. MacArthur in Japan for the purpose of repairing and rebuilding the ordnance and engineer equipment of the US occupation forces there. When, it was dissolved, its work was taken over by the AFFE which became largely responsible for the speedy rearming and re-supplying of the UN forces in Korea, after they had almost been decimated by the communist forces shortly after the outbreak of hostilities in June, 1950.)

In addition to its conferences with AFFE ordnance and engineer officers, the JUSMAG-AFP Team was taken on tours of inspection to various ordnance and engineer shops to give the team the opportunity to observe the actual operation of these establishments. Before returning to the Philippines, the team secured the approval and indorsement of the plans by the AFFE with only minor modifications.

The proposed AFP Ordnance-Engineer Base Shop will be maintained as a general repair, rebuild, and manufacturing shop for all the major services of the AFP. This will mean a great savings to the AFP and to the Philippine Government because at present the repairs, maintenance of all AFP equipment and the rebuilding of major assemblies and vehicles are done by private shops through "contractual services" with the Ordnance. Private enterprises which perform this work for the AFP are naturally given a marginal profit. When it is considered that the Ordnance Service operates more vehicles than the largest land transportation company in the Philippines today, one can realize the great amount of money being paid to these private repair



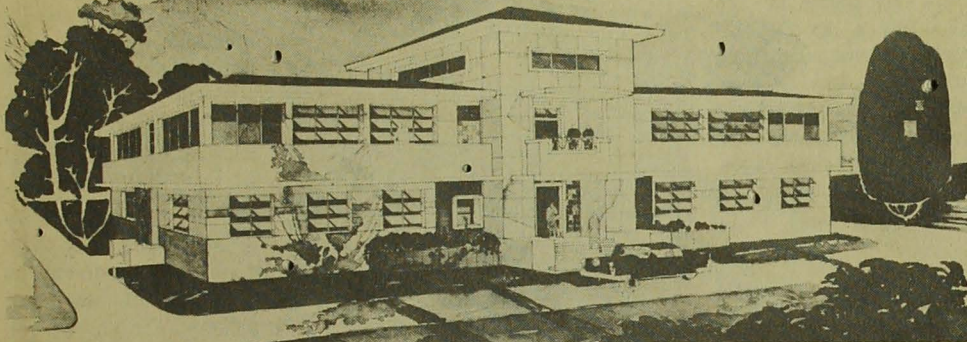
This is how the ordnance base shop will look when it is constructed in Camp Murphy.

shops. With the construction of the AFP Base Shop, however, it is estimated that in ten years' time, the AFP will have accumulated savings sufficient to pay for the cost of the shop. And since the initial cost of construction will be borne by the United States Government under the MDAP, the whole project is certain to prove to be a profitable investment for the AFP.

The AFP Base Shop will be constructed on the northeast corner of Camp Murphy fronting the Santolan Road to Libis. It will occupy an area of approximately nine hectares adjacent to the present Ordnance Depot and the new Salvage Yard and will consist of an Administration Building, a Vehicle Rebuild Shop, an Armament Repair Shop, a Heavy Equipment Shop, a Manufacturing Machine Shop and a Foundry equipped with the latest oil-fired furnaces and re-metalizing and electro-plating equipment. The various shops will be so arranged that incoming items and vehicles from the field will be received at the new Salvage Area, moved to the ready line, and channeled to either the repair shops or the rebuild assembly line. In this way, economically repairable material can be processed with minimum delay and vehicles to be rebuilt can be shoved into the assembly lines. Whenever possible as in the case of vehicle rebuild, a sufficient number of vehicles of one type will first be assembled in sufficient numbers so as to enable the shop superintendent to plan ahead and make the ne-

cessary preparations and requisition enough spare parts to process the whole bunch in assembly-line fashion. Up to now, this speedy and economical method could not be utilized due to the lack of the equipment and shop space necessary for such operation.

In addition, an entirely new activity will be inaugurated by the Ordnance Service upon completion of the AFP Base Shop. This is the manufacture of spare parts and sub-assemblies which are not available locally. Heretofore, whenever such spare parts were needed, they had to be ordered from the United States with the attendant delay caused by the shipping time of from 45 to 60 days and by the necessity of applying for import licenses which in some cases took up as long as six months. In other instances, local dealers who had the necessary items have refused to make immediate sale of their spare parts so that they may raise the procurement price to the detriment of the AFP. In other cases, machine shops who have facilities to manufacture parts as substitutes for the needed items stipulated high or exorbitant prices, especially when they knew that there was pressing need for such spare parts. With the facilities that will become available upon the completion of the AFP Base Shop, these unethical practices of local dealers and shop operators will be stopped. This will also benefit the other technical services who have met similar difficulties as the Ordnance Service. And most important, the manufacture of



The administration building of the base shop. Plans for the installation have already been approved.

spare parts and sub-assemblies, a project in line with the industrialization program of the Government can be started by the shop.

The AFP has heretofore been the recipient of equipment of all categories from the United States. The first big transfer of ordnance equipment occurred on 1 July 1946 when the US Armed Forces turned over all equipment in the hands of Philippine Army troops in preparation for the Declaration of Independence of the Philippine Republic on July 4, 1946. At that time, there were no provisions for the maintenance and repair of ordnance vehicles and armament which formed the bulk of the turned-over equipment. The Ordnance Service then consisted only of the 1st Ordnance Bn which was later reconstituted into the Ord Base Maintenance Bn. It could, however, only take care of 1st, 2nd, and 3rd Echelon work leaving out entirely the 4th Echelon work and delegating 5th Echelon jobs to private shops paid for their work on contractual basis. This situation continued for sometime in the absence of a shop and necessary equipment.

There was even a time, in 1948 and 1949, when this lack of 4th and 5th Echelon maintenance was heavily felt by the Ordnance Service. In those two years, the AFP was literally left to its own resources. It had to buy all its needs because it could not get any military aid from the United States. It was then when the Ordnance Service realized the

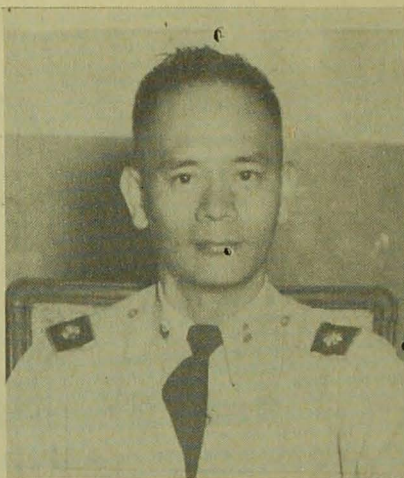
serious difficulty of procuring items that were needed for the repair and maintenance of the equipment. Local purchases were resorted to when the need was urgent, but this method of procurement worked against the AFP because locally available stocks were mostly surplus items which were bought in bulk by surplus dealers without proper preservation and maintenance during storage and new spare parts could only be bought from importers who, after paying import taxes, had to charge high prices for their spare parts to gain some profit. The Ordnance Service was not the only one to suffer this predicament since all the other technical services were more or less in the same situation. Not until the projected construction of the AFP Ordnance-Engineer shops would the long felt need for an AFP self-supporting establishment be realized.

Under the Mutual Defense Assistance Program (MDAP), worn-out equipment in the hands of AFP Troops are gradually being replaced with new or rebuilt vehicles from the United States and from AFFE. The receipt of these equipment has considerably eased the immediate problem of replacing vehicles that had become so worn out as to be un-economically repairable. With the limited facilities available to it, the way the Ordnance Service had been able to prolong the lives of vehicles that should have been salvaged long ago at the normal attrition rate, by patching them up with odds and ends, has been short of miraculous.

Fortunately, equipment under this category are now being gathered from all parts of the Philippines as MDAP replacements continue to come in. These worn-out equipment are now concentrated in the new Salvage Area adjoining the proposed AFP Base Shop. At present there are enough vehicles gathered in this area to insure one-year's work for the Vehicle Rebuild Shop. This work when undertaken will mean the start of not only a Vehicle Rebuild Program, but also the accumulation for the first time of "Depot Stock" for the vehicular requirements of the AFP. A similar program will be followed with regard to equipment of the Corps of Engineers who will have a Heavy Equipment Shop where a rebuild program can be similarly carried out.

With all these proposed activities, most of which have not been undertaken by the Ordnance Service or by the Corps of Engineers before, the question naturally arises as to the ability of these two technical services to construct and later on to operate the proposed AFP Ordnance-Engineer Base Shop. To answer this question some of the observations obtained by the combined JUSMAG-AFP Team may be cited.

During the inspection tours of the team to the Ordnance and Engineer Shops in the Tokyo area, it had the opportunity to observe installations similar to the proposed AFP Base Shop not only as regards their operation but also as to their layout and plan. One such establishment in the Tokyo area is the Fuchu Ordnance Shop which resembles in almost all aspects the proposed AFP Base Shop. This AFPE establishment is located about 26 kilometers north of Tokyo. It rebuilds



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ordnance and engineer equipment from 2-1/2 ton trucks to the heaviest prime movers operated by engineers. It has a capacity of 330 vehicles of all types. This means that a production line can be set up to rebuild 330 vehicles of one type every 25 working days. The lay-out as seen in the diagram on page 14 is very similar to the proposed vehicle "rebuild shop" of the proposed AFP Ordnance-Engineer Base Shop. The only difference between the two shops is the smaller capacity

of the AFP Shop which is designed to rebuild around 120 vehicles per month or roughly 1/3 the capacity of the Fuchu Shop. Keeping this ratio in mind, the Fuchu Ordnance Shop contains 3 times as much equipment as what is intended for the proposed AFP Shop. The foundry of the Fuchu Shops alone had a proportionate floor space and three times the number of furnaces envisioned in the AFP plans. Finally, the personnel of the Fuchu Shops numbered around 2,327 while the proposed AFP Base Shop will demand a crew of around 770 officers and men or roughly 1/3 of the working force of the Japanese plant.

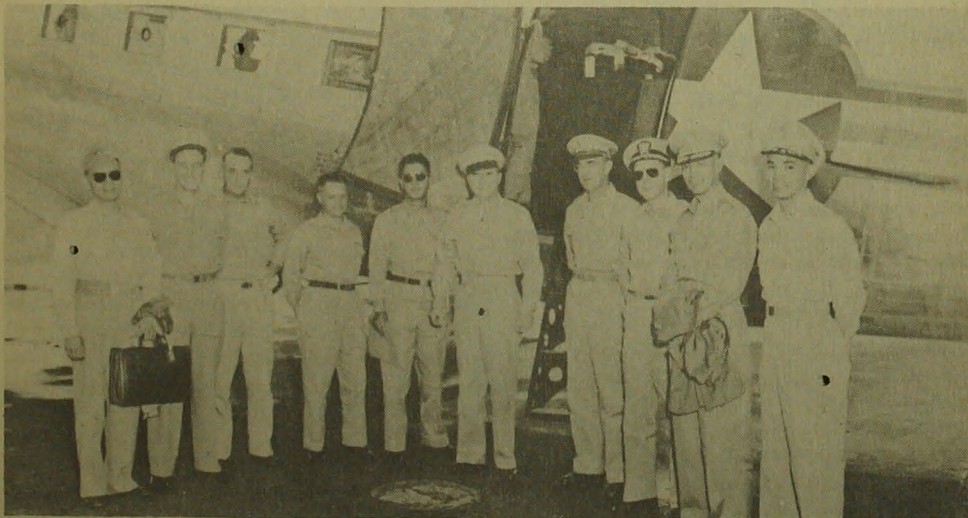
Going into the personnel problem, observations made by us at the Fuchu Ordnance Shops may throw light on the problems we may expect to encounter in the operation of proposed AFP Base Shop. In the Fuchu Shops, it was observed that the majority of the employees were civilian technicians, Japanese mechanics, machinists, foundry men, inspectors, shop foremen and engineers who manned all phases of the different dis-assembly and assembly lines. Only a few U S ordnance officers and EM were holding key

positions in the administration and supervision of these shops. The situation is the same in almost all the ordnance and engineer establishments in the AFFE. The civilian employees acquired the necessary "know-how and technical knowledge" to tackle all the jobs in these shops from the training they received in civilian establishments before and during World War II. Only a little specialist training was given them by the AFFE personnel.

Right now we do not have all the trained personnel needed to operate the proposed AFP Ord-Engineer Base Shop, but we do have a training plan to meet this situation. Aside from the key personnel who have received the necessary training in the United States or in our local Ordnance School, the establishment and operation of an Apprentice School where continuous training of shop personnel will be conducted is now being planned. This Apprentice School will train both civilian and enlisted technicians for the different shops to take care not only of initial personnel requirements but also of the expected personnel turn-over. Operation of such a school is based on the experience of ordnance units and is in accordance with practices

of foreign shops as observed in U S establishments. From past experience it was found that it takes at least 11 months of training to produce an Ordnance technician and from four to five years' practice before he can qualify as an expert. This means that the majority of our DEM technician and civilian personnel have to undergo additional training before they can operate the complicated machinery that will be installed in the proposed AFP Base Shop. This need will be met by the operation of the Apprentice School.

All this planning and training have for their main objective the proper care, maintenance, and repair of MDAP equipment, especially vehicles. This is to prevent a repetition of the sad experience of the AFP in the past when it could not take care of its equipment. We can now look forward to the day when we can be self-sufficient, at least when it comes to the maintenance and repair of ordnance and engineer equipment. And this is a positive step towards our eventual goal of manufacturing equipment needed by the Armed Forces. With present world conditions so uncertain, this step, insignificant as it may seem, certainly is to the advantage of the AFP and our country.



The members of the AFP-JUSMAG ordnance team on their arrival from Tokyo, Japan where they sought approval by AFFE of the proposed AFP Base Shop and toured Japanese ordnance installations. In picture are: Col. Nicanor S. Velarde, Deputy Chief of Staff, AFP; Col. Antonio P. Chanco, Chief of Engineers, AFP; Lt. Col. Blas A. Alejandre, Chief of the Ordnance and Chemical Service, AFP; Col. Paul Hamilton, Lt. Col. P. E. Dusault and Lt. Col. W. A. Stanford, all of JUSMAG.