

# TECHNOLOGY and AIR POWER

By Brigadier General Pelagio Cruz, PAF



We live today in a state of concern over the multifarious problems that confront the country. In a larger sense we live in an era which may prove in the near future to be either the prelude to the millenium or the prelude to man's reversion to the dark ages. The contradictions between man's desire for peace and man's continuous production of weapons for war find expression in the cold conflict that today is raging between our chosen way of life and Communism.

Whether the international situation will aggravate into a shooting war today or tomorrow or in the next few years, our country can have no better way of preparing itself for peace, if peace there be, or war, if war must come, than by intensifying the training of our youth to meet the responsibilities of a sovereign country.

### Technical Men Needed

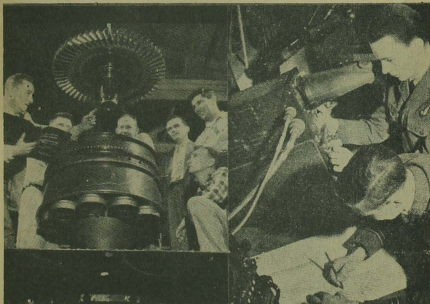
If war should come, technical men will be of great assistance in producing the materials of war that will be necessary. If peace should continue, the same technical men could help produce the wealth that will bring prosperity and happiness to our people.

The Philippines has always been in great need of foreign know-how. We have always hired experts in all branches of knowledge from electronics engineers to fishing experts.

Considering the tremendous natural wealth lying dormant in our country, there is no danger whatsoever of an over-supply of technical men. This is a field in which we have barely scratched the surface.

Now there are those of course who argue that this country is basically an agricultural country. Let us not concern ourselves with that controversy. The training of technical men would not wait for the decision as to whether or not the Philippines will continue to be an agricultural coun-

*Considered a basically agricultural country, Philippines in modern age cannot ignore her great need for technological activities for production of peacetime and wartime materials notably those needed for an adequate air power*



Greatly in need of technical men, Philippines can take cue from many technologically advanced countries whose citizens shown in photo, can produce the materials of war.

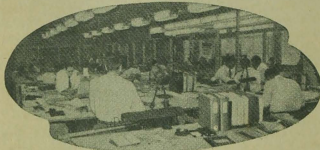
try or become an industrial country. It will take a long time before we can produce the number of qualified technical men needed to man our existing industries. It will take still a longer time to train the number we shall need if we are to embark upon an intense program of industrialization such as the present program of our government seems to indicate.

#### Nuclear Power

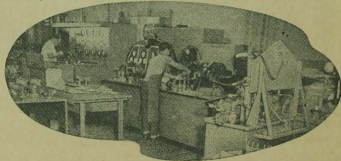
Only recently in Congress, Speaker Jose B. Laurel, Jr. presented a Bill appropriating P2,000,000.00 for the establishment of an industrial research center in this country. It is my fervent hope that some day this center if realized, and all the other government agencies of technical research like the Institute of Science and Technology will be fused into a

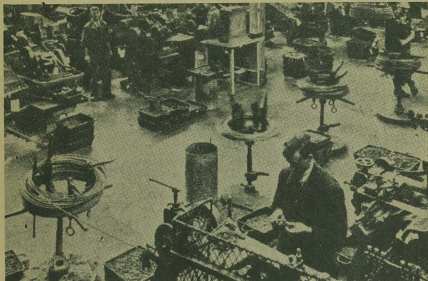
single agency which can consolidate and give unified direction and integration of both military and civilian efforts at technological researches and developments. The decision to locate in the Philippines the \$20,000,000.00 Nuclear Research Center for Asia makes it even more imperative that we put together the loose ends of our technological effort so that we may better absorb the benefits that will come out of this Nuclear Research Center.

Already in the United States and probably in Russia and other big powers, the atom is being harnessed for big peacetime uses. We hear now radiation is today being used to aid in the cure of cancer, and now radioisotopes are utilized for diagnosis and for therapy. The atom is now



*There is no danger whatsoever of an over-supply of technical men in the Philippines, which will take still a long time to train the number needed in time of war.*





*In an island country like the Philippines, the need for air power for defensive purposes becomes more compelling. Photo shows an English aircraft spare parts plant. Filipinos must strive to have similar factory to insure the country's security.*

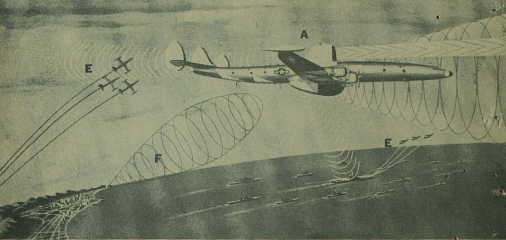
being utilized for improving farm crops that will be better able to resist drought and diseases. There are now plans among great powers to use the atom to generate electricity and later to run ships, locomotives, cars, buses and trucks. All these possible peacetime uses of the atom open whole new fields to technologists in this country.

#### For Air Power

It has been said that there is no need to develop a strong Philippine Air Force. This is a thinking which is an inertia of the techniques of fighting wars as experienced in the First World War and the early phases of the Second World War. Today, no offense or defense can be effected without a substantial air covering force. No invasion, whether

airborne or water borne, can be undertaken without first insuring air superiority. And no defense against such forms of invasion can be effective without insuring security of the skies under which defenders must fight.

In an island country like the Philippines, the need for air power for defensive purposes becomes more compelling. The immediate potential enemy of this country is not a maritime power. The real threat to the country stems from a potential enemy with a huge air power. The development, therefore, of an air force in our island country should be the primary consideration in insuring the sovereignty of this Republic. All other forces earmarked against overt aggression must assume a subordin-



ate role.

It has been claimed that due to the operations of the Mutual Defense Treaty between the United States and the Philippines, the United States will shoulder the responsibility of air defense of the country. I am constrained to take exception to this claim.

#### Two Phases of Air Defense

The phases of air defense of any country to my mind fall into two categories: that of the absorption phase and secondly, that of the retaliation phase. The absorption phase is the air defense called for in the first hour or the first day against enemy attack. The retaliation phase comes only after the absorption phase. The two theories find strength in the concept that democratic countries do not precipitate nor start wars. For war, in democratic states, as an instrument of offense, is not an accepted principle. We only hit

after we are attacked. And it is this period of initial enemy attack that poses the gravest danger to our lives and properties.

American Air Force units that we can count upon are stationed here to protect us during the initial phase of absorption or battle of survival. By their very distance from the Philippines, U.S. Air Force units in Okinawa, Guam, Hawaii and even those in the mainland of the United States can only come to our succor after the first hour of attack. Even the U. S. 7th Fleet with all its striking power is only a retaliatory force with respect to the Philippines because its primary mission is the defense of Taiwan.

It is the first hours of enemy attack that counts. Because of the capabilities of modern mass destruction weapons, within the first hour or the first day of enemy incursions, our cities can be laid waste, our indus-

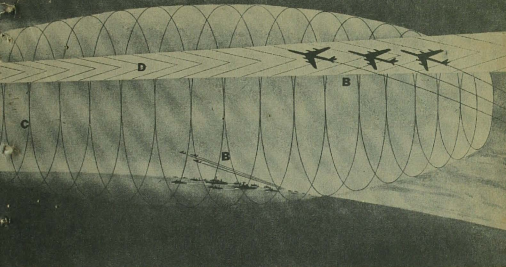


Photo illustrate workable plan of U.S. for total air defense. Potential enemy of the Philippines is likewise an air power, necessitating her to endeavor for build-up of the Philippine Air Force to be able to cope with any attacking force.

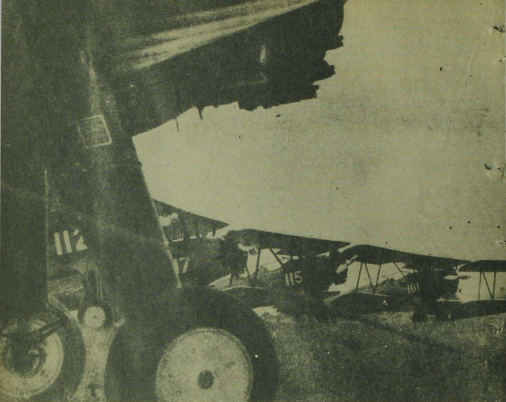
tries can be razed to the ground, our communication lines can be cut, our surface forces can be immobilized. Indeed, life during the first day can be extinguished. We do not have in the Philippine Air Force nor in the Air Force of the United States stationed in the Philippines, forces in being of sufficient strength to ward off these initial destructive attacks. Gen. Lawrence Kuter himself, Commanding General, U.S. Far East Air Forces, recognizes this sad situation. It is true that there will be the ret-

liation after the initial enemy attack. But what good is retaliation to us if we shall have been destroyed first? What good is razing to the ground and burning enemy installations if we shall have been burned first? What good is death to the enemy when we shall die first? We must continue to develop our Air Force even sufficiently for the first day of enemy attack. The more Filipino lives and properties we save the first day, the more chances we have of surviving the war.

\* Excerpts from an address delivered by the author to the graduates of the Feati Institute of Technology early this month.

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In spite of the fact that air power alone can never be decisive in total war, the air battle must be won. In spite of all the new developments in the field of atomic energy and the various military applications, the airplane continues to be the best method of projecting the power of the atom to the battlefield, and to the heart of any large land-mass nation. —General of the Army Omar N. Bradley



FROM its modest start two decades and a year ago with a handful of men and a group of rickety contraptions known as JN-4 biplanes for instructional purposes, our local air arm has grown into a respectable force which celebrates its 21st anniversary on May 2.

Twenty-one years ago, it will be recalled, the PAF was born after a long verbal clash of the late President Manuel Quezon with lawmakers of the Philippine Legislature. Against oppositionists who did not then realize the country's need for an air force, President Quezon saw

his battle won when the bill he sponsored became Act No. 4194, authorizing the creation of an aviation unit which would undertake the mission of reconnaissance support for the semi-military organization in its peace and order campaign. It was called the Philippine Constabulary Air Corps and later renamed the Philippine Army Air Corps after the inauguration of the Philippine Commonwealth.

#### Retrospect

The toddling local air force was amidst its training when war clouds gathered over the Far East. On Aug-