surpassed in utility or performance by other equipment, in the blueprint or mock-up stage, but not yet in production. Unless our air forces can continually improve the equipment in use, we will find ourselves subject to attack by others with no answer except to "take it on the chin" until we have created modern equipment through overtime methods. That is a very expensive practice.

The American people must never again assume— as after the last war and as the French did up to the break-through in 1940 that numbers of aircraft and quantities of equipment make an air force. A second-rate air force is worse than none because it gives rise to a false sense of security—which bombs may quickly demolish.

7.Even an up-to-date air force in being may not constitute air power. Preeminence in the air implies maximum ability to maintain and expand existing establishments. There must be a strong and healthy aviation industry, building thoroughly modern aircraft and equipment, and developing, testing, and experimenting with advanced designs for tomorrow. Segments of industry must be capable of and ready for rapid conversion to quantity production, and certain Government owned plants and production equipment not subject to rapid obsolescence should be kept in stand-by as a war reserve against the potential aggressor.

The importance of a progressive aviation industry cannot be overstated One way to keep it progressive after final victory is promptly to sell, salvage, or scrap excess or obsolete planes so that they will not hang over the Air Force and the aviation industry retarding development. This happened after the last war, but must not happen again. The AAF is already taking steps to meet this situation by declaring planes and equipment surplus as they are currently worn out or no longer useful, and turning them over to the Surplus Property Board for appropriate disposal.

8. Air power must be employed from large, fully equipped, strategically located bases. Our air forces must be able to meet and overpower the aggressor's air threat as near as possible to its source. It is obvious that air operations are already global. Our air forces have learned in the stress of war to operate in all climates and under all conditions.

These lessons must not be forgotten. Air power in the future will depend on the possession by our air forces of the knowledge and experience required for immediate and continuing worldwide operation.

- 9. In all-out war the Army tactical air force and the Navy air force teams must work closely together with our Army and our Navy. Each must understand the techniques, tactics, capabilities, and limitations of the other. This can only be secured by actual service together in tactical exercises and maneuvers during times of peace.
- 10. We have learned and must not forget that from now on air transport is an essential of air power, in fact, of all national power. The undreamed of development of our fast air transport and the way in which it was used has been set forth in this report and in the report which preceded it. We must have an air transport organization in being, capable of tremendous expansion.

Another lesson taught in this war is that a healthy, self-sustaining commercial air transport industry is vital to the realization of effective air power. The contribution to the military of our competitive civil carriers in equipment, trained personnel, operating methods, and knowledge have been of first importance in this war. The AAF and the Nation as a whole have a very real interest in

the preeminence of our civil air transport structure.

- 11. Troop carrier operations are present-day actualities, as we have seen in Crete, New Guinea, Italy, Normandy, Southern France, Holland, and Burma. The American people must visualize that the aggressor's blow may be attended by dropping of large bodies of troops to seize our vital centers. Similarly, to assure our security, we must be prepared to counter this employment of the airplane and to employ it more effectively ourselves.
- 12. None of these essentials of air power will be effective without adequate trained and experienced personnel. In this war, with a very small nucleus, we were forced to start from the bottom with raw material. The AAF Training Command has done a tremendous job in turning out large numbers of navigators, bombardiers, pilots, aerial gunners, glider pilots, liaison pilots, WASP's, and others. It has trained thousands of technicians and specialists essential to air power. All this took time, but we cannot always count on having time.

There must be in continuous operation an up-todate training establishment fully supplied with the latest aircraft and equipment. The AAF and the Nation must encourage private flying. We must make available to educational institutions aircraft and equipment that can be spared to help familiarize American young men and women with the fundamentals of aviation, for it is obviously upon youth that the Nation must rely for its protection against attacks of aggressors. So much for some of the lessons war has taught.

At this writing, the struggle in Europe is far from won, yet we are increasing AAF operations in the Pacific to the limit of our ability. With eventual victory in Europe, it will be no simple matter of flying our men and planes from Europe to the Far East and promptly bringing Japan to her knees. Bombers can fly to the Far East, but fighter planes will go by boat, and this takes time. Planes must have modifications. Where possible, AAF men will be granted leave in the United States, but many and possibly most of them will have to go direct from Europe to the Pacific. The urgency of war may demand it. Crews will have further training after they reach the Pacific.

The vast distances and the geography of the Pacific call especially for aerial offensives, but they also put great burdens on organization. Up to the present, with comparatively limited numbers of men and aircraft, and working closely with the Ground Forces and the Navy, We have cut Jap lifelines, and we have established new strategic bases. But we must build airbases closer to Tokyo, and we must bombard the Japanese mainland on an unprecedented scale. We must bring the maximum amount of air power to bear against Japan with the least loss of time, so that Japan will be defeated with the minimum loss of American lives.

The AAF can take pride in what has been accomplished in the past 3 years, but these accomplishments have cost the lives of many brave men. Air Force men have been in violent combat every minute since Pearl Harbor. Individually, they have crossed enemy lines to carry the fight to the axis 6,500,000 times through 31 December 1944. Our men overseas have done their utmost, and we shall not forget. It is with sober determination that we of the AAF undertake to increase our contribution to the total war effort of the United Nations. H. H. ARNOLD, Commanding General, Army Air Force~.

The End