AIA planes

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GEN. WEYLAND URGES MORE U.S. AIR POWER

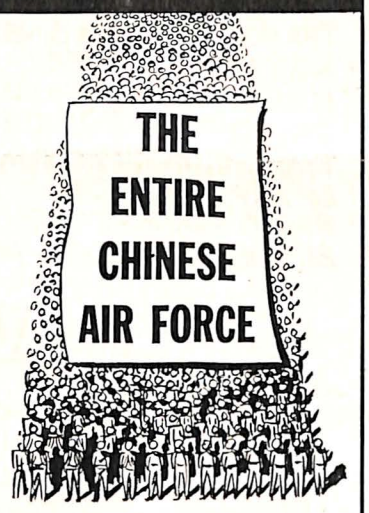
U.S. ACES OUTSCORE ENTIRE RED AIR FORCE

12 USAF ACES

DESTROYED

68

MiG-15's



DESTROYED ONLY

58

JETS

Twelve USAF jet aces have shot down 68 Communist MiG-15s in Korea. This is 10 more jet "kills" than have been scored by the entire Chinese Air Force against the USAF in air-to-air combat.

"PLANES" SOURCE: USAF

Air War in Korea Enters Third Year

Exactly two years ago — on June 25, 1950—the North Korean Communists crossed the 38th Parallel and attacked South Korea.

On the second anniversary of the war's beginning, and after two years of air war in Korea, U. S. aviation experts are taking stock of American air strength, appraising what has been learned of Communist tactics and air power, and computing results of United Nations air operations.

This issue of PLANES is devoted to a resume of the first two years of the air war.

Says War Reveals A 'Serious' Threat To Air Supremacy

Written Especially for PLANES

By

Lieut. Gen. Otto P. Weyland
Commanding General, United States
Far East Air Forces

In addition to assisting the United Nations ground forces in holding the Communist hordes at bay in Korea during the past year, air power carried on a sustained offensive that cost the enemy heavily in manpower and in Russian-made equipment.

By intensive operations against the rail and road networks of North Korea, our flyers delayed the movement of equipment and supplies to the front lines. The attacks by United Nations aircraft cost the Communists thousands of Russian-built trucks each month and vast quantities of other equipment.

Reds Stopped in Daylight

During this year of aerial interdiction operations, no significant ground attack developed against the UN ground forces. Allied flyers prevented the enemy from establishing a single important air base in Northern Korea. UN surface forces, logistic establishments and airfields were immune from hostile air attacks. The Communists were virtually unable to move men or supplies during daylight.

Gen. Weyland

No Basis for Complacency

Unfortunately, these facts do not furnish a basis for complacency. It is true UN airpower has been flying an average of around 1,000 sorties per day and can strike anywhere in North Korea. Air power in Korea, however, has not been exploited as it would be in a full-scale war. Because of the peculiar nature of the conflict, resulting from UN efforts to prevent a broadening of the war and the dissipation of our strategic air power, our offensive air strength has not hit at the major productive facilities and the vast supply depots which lie beyond the Yalu. We have not hit the *sources* of the enemy's war-making potential.

(See WEYLAND, page 3)

Pacific Airlift Flights In Two Years Equal To 6,000 Trips Around World

United Nations forces fighting in Korea have been supported by the greatest airlift in world history. More than 150 million plane-miles—equal to 6,000 times around the world — have been flown over this trans-Pacific aerial bridge.

Airlift planes have ferried over 156,000 high-priority personnel to the Far East, enough to man more than eight reinforced infantry divisions. And they have transported a total tonnage comparable to enough 105-mm. howitzers to outfit all U. S. infantry divisions in World War II five times over.

Fly Three Routes

In all, planes of the Pacific Airlift have flown 11,000 round trips over three routes linking the West Coast and Japan, delivering better than 100,000 tons of cargo, mail, passengers and patients — and flying some 548 million ton-miles in the process. The number of passengers and patients carried exceeds the entire population of Atlanta, Georgia.

Shows Strategic Importance

The Korean War, fought 7,000 miles from U. S. shores, has demonstrated as never before the strategic importance of airlift and the value of military transport aircraft. The Pacific lift has been a major means by which critically needed manpower and supplies to halt powerful Communist offensives have been delivered at the right place — and in time.

Within three months after the Reds attacked, the combined fleet of Military Air Transport Service planes, leased U. S. commercial car-

(See PACIFIC LIFT, page 4)

Navy Air Blasts Korea Reds With Record Tonnage

In two years, Naval aviation in Korea has delivered more bomb and rocket tonnage and has expended more ammunition than it did in the four years of World War II.

Within nine days of the North Korean attack across the 38th Parallel, a Navy carrier in the Yellow Sea was launching air attacks against the Communists. Since then, over 150,000 sorties have been flown by increasing numbers of Naval and Marine pilots. These steady attacks are continuing at a rate of about 7,500 per month.

Task Force 77, the major carrier striking force off the east coast of Korea, is built around two Essex-class carriers, each operating about 100 aircraft—both jet and piston engined. On the Korean west coast, Naval air operations are conducted by a U. S. light carrier and a British escort carrier, operating alternately.

Joining in Operation Strangle when it began about a year ago, Naval and Marine aircraft have concentrated since that time on continuing attacks at rail, road and supply networks. Intelligence estimates show that for a period of three months, over 90% of the rail and road transport in the eastern half of

(See NAVY AIR, page 4)

PLANES

Planes is published by the Aircraft Industries Association of America, Inc., the national trade association of the manufacturers of military, transport, and personal aircraft, helicopters, flying missiles and their accessories, instruments and components.

The purpose of *Planes* is to:

Foster a better public understanding of Air Power and the requirements essential to preservation of American leadership in the air;
Illustrate and explain the special problems of the aircraft industry and its vital role in our national security.

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The Aircraft Industry —and the Korean War

By DeWitt C. Ramsey (Admiral, USN, Ret.)
President, Aircraft Industries Association

In the two years since the Korean war started, it is estimated that the United States aircraft industry has produced some 9,000 to 9,500 military planes of all types.

This is approximately double the military aircraft production of 1948 and 1949—the two years preceding the war.

Although this has been a commendable production achievement, one accomplished in the face of successive production crises peculiar to partial mobilization, it falls far short of the industry's World War II record.

While there is a very definite upper limit to U.S. aircraft production potentialities—based on the nation's economic and natural resources—we have not yet approached that limit. We *have*, however, put into production every ounce of airframes, engines and components for which the aircraft industry has been allocated the materials, machine tools, manpower and priorities.

Under the "guns and butter" philosophy of rebuilding America's military strength, priorities and materials have been distributed among all segments of the economy. They have not been channeled, as is the case in full mobilization, to meet primarily the needs of defense production.

Under such a distribution, the aircraft industry has faced recurrent shortages of materials, machine tools, skilled labor, engineers and other essential elements of production. Output has been hampered by strikes, and dislocations have been brought about by schedule revisions and cutbacks.

During this period of expansion, the aircraft industry has been confronted also with unprecedented design and manufacturing method requirements. Today's aircraft are incredibly complex. We are experiencing a revolutionary transition from piston to jet powerplants. Never before have requirements been so great for electronics and other components for warplanes that must fly and fight at supersonic speeds and under greatly diverse conditions of altitude, temperature and weather.

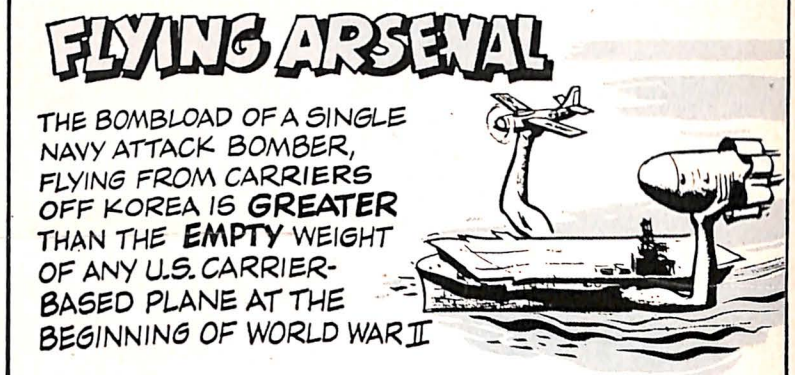
In our recognition of the greatly expanded rate of aircraft production, however, we must not lose sight of the fact that this industry could be building more planes—had the planning started soon enough and had the urgency been considered imperative enough to funnel adequate ingredients of production into areas where they could be converted into air power.

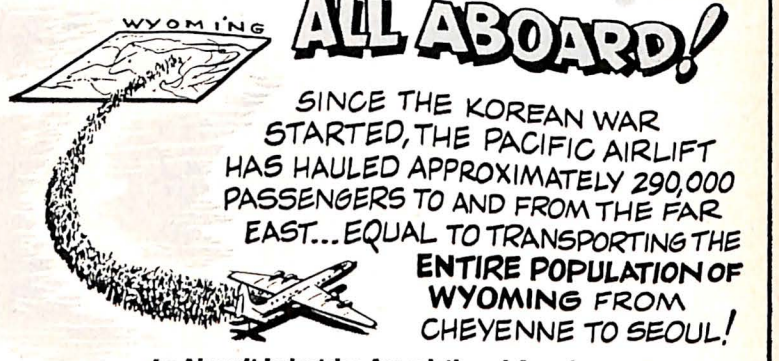
Instead of 9,000 to 9,500 military planes, we could have produced in the past 24 months an estimated 18,000 to 19,000 aircraft, under the stimulus of full mobilization—but it would have been necessary to cut deeply into the civilian economy to do so.

Korea highlights and repeats the basic production lesson that the vast potentialities of our defense industries, particularly the aircraft industry, cannot be mobilized overnight. In the first five months of this year, we produced more military planes than were built in all of 1950. Yet we are still fighting the air war with weapons ordered before the hostilities began.

Decisions and plans made today will determine the level of U.S. air power in the middle and late 1950's—just as decisions made in 1946, 1947 and 1948 resulted in our present inadequate air power and in the high cost and increased time required to rebuild our air strength following outbreak of the Korean war.

PLANE VIEWS





by Aircraft Industries Association of America

PLANES QUIZ

Seventy per cent score on this quiz is excellent. Sixty per cent is good. Answers on Page 4.

1. During the early part of the Korean War when North Korean forces were smashing southward from the 38th Parallel, what percentage of enemy casualties was inflicted by air power? (a) 12%, (b) 23%, or (c) 47%?

2. Strength of the Chinese Communist Air Force, according to recent intelligence estimates, is: (a) about 600 warplanes, (b) about 1,100 warplanes, (c) over 1,450 warplanes.
3. How many airfields are located in North Korea? (a) over 100, (b) less than 50, (c) less than 5.
4. To repair rail lines cut by constant United Nations air attack, the Chinese Communists are forced to employ a daily force of approximately (a) 20,000 men, (b) 100,000 men, (c) 50,000 men.
5. What percentage of the Chinese Communist Air Force is equipped with Russian-built MiG-15's? (a) one-sixth, (b) one-third, (c) one-half.
6. To become a jet ace, a U.S. pilot must shoot down (a) two enemy planes, (b) four enemy planes, (c) five enemy planes?
7. For every single sortie flown against ground targets by the Communist air forces in Korea, the USAF has flown: (a) over 2,800, (b) about 1,420, (c) 100?

8. The average ton of military equipment transported by Pacific Airlift for use in Korea travels: (a) 23 times as far, (b) 12 times as far, (c) 6 times as far as the average ton carried in the Berlin Airlift?
9. Aircraft carrying U.S. combat troops were landing in Pusan less than (a) 48 hours, (b) 24 hours, (c) 12 hours after Washington authorized use of American Army forces in Korea?
10. Peak USAF strength during World War II was 243 wings. In June, 1950, when the Korean War started, USAF strength was (a) 48 wings, (b) 70 wings, (c) 95 wings?

Communist MiG's Unable to Halt UN Air Assaults

Events in Korea have proved one fact conclusively—without air power, UN ground forces could not have remained on that embattled peninsula.

Aircraft alone were able to deliver fresh troops and critical supplies to U. S. and ROK forces in time to hold the Pusan Perimeter. When repeated North Korean counterattacks threatened to dislodge UN troops, which were short of artillery and their lines overly extended, U. S. fighters moved in with bombs and rockets.

With minor exceptions, the air war in Korea has been strictly tactical—a classic example of the air-ground team in operation. Never before in the history of wars has the man on the ground relied more heavily on air support for the accomplishment of his combat objectives.

Rail System Shattered

His aerial partner, flying close air-support missions against battlefield targets, and interdiction strikes against enemy supply lines, communications, and troop concentrations, has exacted a tremendous toll of the enemy's tanks, trucks, artillery and personnel. The Communist rail system in North Korea has been shattered by air.

The casualties inflicted on the enemy by Air Force, Navy, Marine Corps and UN planes—some 231,000—are equal in number to 33 Chinese Communist divisions. For the past ten months, UN tactical aircraft have been destroying enemy trucks at the rate of about 7,000 per month—faster than Russia is building them.

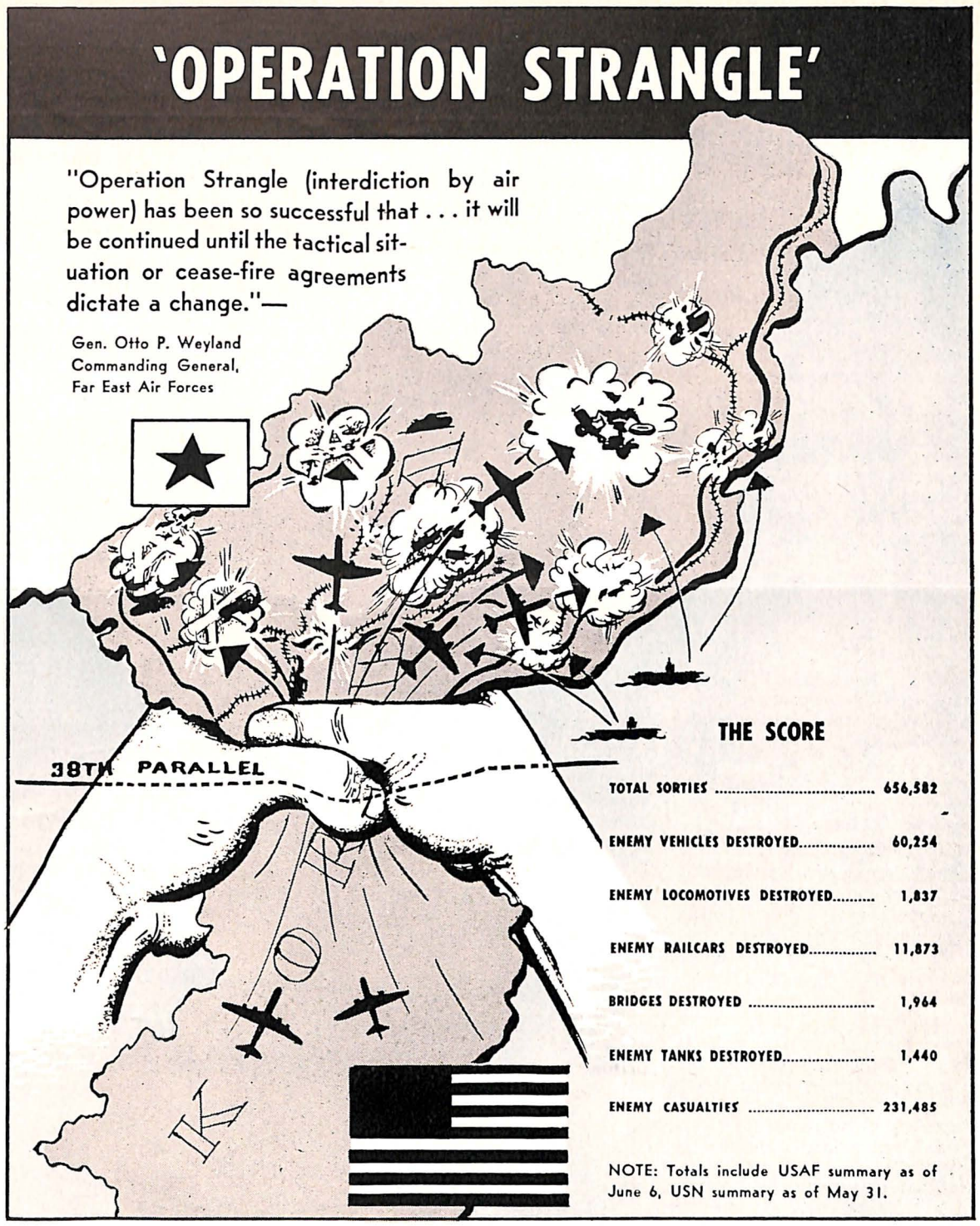
In more than 650,000 sorties and nearly two years of air operations in Korea, UN air forces have lost only 985 planes to enemy action, the great preponderance of these being shot down by ground fire. Scarcely a tenth were lost in aerial combat.

Reds on Defensive

On the other hand, UN planes have destroyed 703 (including 127 "probables") Communist planes—nearly three-fourths as many as have been lost by our forces—despite the fact that enemy planes have rarely ventured over UN lines within range of antiaircraft batteries. Red air activity has been almost wholly defensive.

UN aircraft have taken the fight to the Communist air forces—tactical fighters and bombers blasting North Korean targets often within sight of Red air bases across the Yalu. The Communists, forced to fight close to home, have sent their jet fighters in the air only in unsuccessful attempts to stop the UN attacks.

One USAF jet-fighter type, flying cover on interdiction missions in the north, has shot down 293 MiG's, while only 35 jets of this type have been destroyed by the Russian-built jet fighter in air-to-air combat. This U. S. jet aircraft's superiority over the MiG is thus established at 8 to 1.



(Cont'd) WEYLAND SAYS AIR POWER STRETCHED 'DANGEROUSLY THIN'

We must recognize, too, that the full power of the Chinese Communist air force (which has been averaging about 100 observed sorties per day) has not yet been exerted; nor has it been employed thus far in offensive operations. This Communist air force consists of more than 1,700 planes of all types. This increasingly strong force is, we know, supplied by the Soviet Union. During the past year, Chinese Communist air has been bolstered by numbers of modern jet aircraft.

Meanwhile, the air strength of the free world has been stretched dangerously thin in order to divert aircraft to the Korean theater. Even so, should we become engaged in a full scale war beyond the North Korean border, there would be a pressing need for substantial air reinforcements. An important factor in this balance of air power is the fact that the Communists have more MiG-15's in the theater than we have of our latest-type jet fighters.

The tremendous potential of this Communist air force must be recognized. We cannot continue indefinitely in a period of world tension to rely on the limited equipment and the superior pilots which have, in the past, given our Sabre-jets an 8-to-1 advantage in air-to-air combat with the MiG in spite of a numerical inferiority.

It is, I believe, increasingly apparent that the air force of any nation can be no stronger than the industry which supports it, and which constitutes a part of the air-ground-sea military team. In Russia, heavy investment was made in design and production of jet aircraft following World War II. Accelerated development of the Red Air Force became a major project in the U.S.S.R.

During the same postwar years in which Russia initiated its efforts to build a supreme striking force in the air, the United States entered a period of almost frantic demobilization. Our air strength was reduced from 218 groups on VJ-day to a paper strength of 52 groups in 1946, of which only two could be considered operationally effective. The aircraft industry, which supplies the planes and equipment for the Air Force, suffered similarly. Its orders sank to record lows in the immediate postwar period.

On the basis of Soviet developments disclosed in Korea, we must face a serious challenge to American air supremacy. Our best jet fighters in Korea are better all-purpose aircraft than the MiG-15. The aircraft being produced by the U. S. aircraft industry today are, we believe, generally superior to those being built by Russia. But this alone is not sufficient. To attain security, we must have adequate air power in being, able to counter enemy forces.

This challenge to U.S. air strength can be met only by serious efforts—more serious efforts than any this nation has undertaken thus far.

Korea Proves New Battlefield Uses For Helicopters

The Korean War demonstrated for the first time the amazing combat capabilities of an unorthodox and previously untried air vehicle—the helicopter.

Like U.S. jets, the helicopter received its initial battle test in Korea. It has proved suitable for a multiplicity of purposes that even its most ardent advocates never imagined.

Helicopters were introduced in Korea to provide a rapid means of evacuating wounded from front line positions and for rescue missions behind enemy lines or at sea. In this, one of their most important roles, they have saved countless UN servicemen's lives.

As of last month, Army helicopters alone had flown 4,500 combat casualties from forward areas to aid stations and hospitals. USAF estimates that 90% of its aerial evacuation and rescue effort in Korea was accomplished by helicopters.

In addition, the whirling-workhorses have been used to supply front-line operations, to transport observation parties, to string communications, and to provide a swift means of air reconnaissance and observation in forward areas.

A unique application by the Army is the use of rotored aircraft to establish radio communication between two ground radio sets (having "line of sight" characteristics) when the sets are separated by a hill mass.

The Marines have landed troops in helicopters behind enemy lines, forecasting use of the rotor craft in airborne operations when larger troop-carrying helicopters now being developed by U. S. manufacturers become operational.

These large rotored transports of the future should prove highly useful for shifting forces behind friendly lines to meet enemy thrusts, to concentrate troops preparatory to counterthrusts, to build up beachheads, and to move troops to inaccessible areas.

USAF Transports in Korea Carry Over Million Troops

In a spectacular demonstration of "battlefield" airlift, USAF cargo aircraft—carrying high priority war materials, passengers and patients—have shuttled day and night between Japan and Korea and between Korean airstrips since the war began.

The unending logistics and evacuation operation has flown over 1,125,088 passengers and patients between Korean airstrips and on the Korea-to-Japan run, and has carried over 393,317 tons of cargo destined for United Nations forces.

In addition to shuttle operations within Korea, the USAF cargo aircraft constitute the second phase of the Pacific Airlift. They pick up MATS cargoes in Japan, transporting them to Korean airstrips where they are turned over to ground forces.

High Speed U.S. Jet Fighters in Korea Stem From Jet Prototypes Ordered in Mid-1940's

The first models of the five most active Air Force and Navy jets in Korea were ordered, on the average, seven years ago—in 1945.

This fact is revealed in an Aircraft Industries Association analysis of the lead-time factor in modern aircraft production.

Lead-time for a high speed jet fighter has been calculated at five years from first design to final flight tests of a new prototype. An additional two years is ordinarily required to reach significant production rates.

As a result, jet fighters designed at the end of World War II are just now reaching substantial production rates—and planes being designed today will be operational in useful numbers about 1960.

For heavy bombers, the time interval increases. Eight years ordinarily are required between conception of a design and the time it reaches production, with the lead-time tending to increase in recent years because of the complexity of transition from piston to jet powerplants.

The Aircraft Industries Association analysis of U.S. combat planes in Korea also revealed that large numbers of piston-engined aircraft ordered during World War II are still operational — in improved and modified versions — in Korea.

These piston-engined aircraft (prototypes of which were ordered, on the average, in 1941) serve to bolster numerically inferior U. S. air power. Lack of substantial numbers of jet aircraft in Korea has been attributed to lack of military research and development funds in the immediate post-war years—and to low-volume orders during that period. Aircraft production fell, for example, from 96,318 in 1944 to a trickle of approximately 1/50th that number in both 1946 and 1947.

NAVY AIR

(Continued from page 1)

Korea was completely stopped. Since then, day and night operations have continued heavy inte diction of these supply arteries.

When the Korean War started, Naval aviation was at its lowest aircraft strength since the end of World War II. By accelerating some production and by withdrawing some storage aircraft, the pipelines to forward areas have been kept full—but the war has constituted a severe drain on Naval aircraft inventories.

Almost entirely with intense anti-aircraft fire, the enemy had destroyed 341 Naval aircraft as of May 1—including one jet destroyed in air-to-air combat.

These jets, demonstrating their efficiency in carrier operations for the first time, have been used as standard carrier fighters—employed both as bomb carriers and for anti-aircraft neutralization in front of attack aircraft.

North Korean War Industry Knocked Out in 96 Days

Within 96 days of the start of the Korean war, USAF medium bombers had flown approximately 1,000 sorties—and had knocked out every strategic target in North Korea.

Ranging over the 48,000 square miles of North Korea—roughly the size of England—the bombers unloaded tons of explosives on the peninsula's fewer than two dozen strategic targets: factory concentrations, major storage depots, big rail centers, and governmental communications.

The Air Force's World War II big bombers that had carried the war to the Japanese heartland devastated in less than three months the entire North Korean war production machinery installed by the Communists.

The ground rules of the Korean war—which confined air power and ground forces to the Korean peninsula, in a United Nations effort to avert broadening of the conflict—prevented the big bombers from hitting at the sources of the enemy's strength: China and the Soviet Union.

With the strategic mission in North Korea accomplished, and extension of the war to the enemy's basic production centers ruled out, strategic bombers then joined the tactical air effort in Korea, throwing their power against enemy air and surface forces on the battlefield.

PACIFIC LIFT

(Continued from page 1)

riers and United Nations transports were hauling over 100 tons daily to the Far East—more tons per day than the entire MATS Pacific Division flew per month before Korea.

Each ton destined for the Far East is transported an average of more than 7,000 miles. As early as September, 1950, Pacific Airlift planes were flying some 278,000 plane-miles per day, exceeding by some 30,000 plane-miles the best U. S. efforts on the spectacular Berlin Airlift.

Everything from howitzers to helicopters — batteries to blood — has been flown to Korea in the past two years.

Answers to Planes Quiz

1. (c) Aircraft inflicted approximately 47% of all enemy casualties.
2. (c) Intelligence estimates place Chinese Communist air strength at more than 1,450 warplanes.
3. (a) Over 100 airfields are located in North Korea—but UN air attacks have prevented their active use by Communist planes.
4. (b) Approximately 100,000 North Koreans are employed daily in repairing bomb-blasted Communist rail lines.
5. (c) About one-half of the Chinese Communist Air Force consists of MiG-15's.
6. (c)
7. (a)
8. (a) Average length of the Pacific Airlift routes is 7,000 miles.
9. (c)
10. (a)