

COMMUNIST VIET CONG TARGET in Bien Hoa province 50 mi. south of Saigon is strafed and bombarded by South Vietnam Air Force fighter-bombers and U. S. Army Bell UH-1B helicopters. USAF 2.75-mm. air-to-ground rocket (top) streaks toward the target during the strike, one of the largest air and ground efforts mustered to date against the Viet Cong. Troops were landed a few minutes later.

South Vietnamese Raiders Extending War

By Larry Booda

Saigon—War against the Communists already has erupted over the borders of South Vietnam in hit-and-run guerrilla raids and infiltration moves as far north as China, setting the stage for large-scale movements against Viet Cong insurgents.

With U. S. backing in aircraft, weapons and money, an estimated 50,000 elite South Vietnamese special forces troops are being trained to take the offensive in over-the-border strikes at Communist supply centers and communications routes.

Despite Defense Secretary Robert S. McNamara's implication in Washington Mar. 26 that the decision has not yet been made to extend the war (see p. 18), it is known here that guerrilla strikes against the Communists have been increasing since last summer. Objective of these operations is to stop the southward flow of weapons and trained Viet Cong troops along the routes in Laos and Cambodia as well as inside North Vietnam.

Laos appeared ready last week to permit South Vietnamese raids in pursuit of Communist Vietnamese inside Laos. It was reported that rightist Laotian Vice Premier Gen. Phoumi Nosavan and South Vietnam Premier Maj. Gen. Nguyen Khanh had reached a border crossing agreement.

Key factor in the current raids is air lift provided by Air America, a U. S.

air cargo company incorporated in Delaware under a maze of legal obscurities that camouflages its U. S. government sponsorship. Air America is operating a diversified force of aircraft, ranging from the four-engine Boeing Stratoliner to helicopters and light aircraft, within and outside the borders of South Vietnam.

An indication of the increased tempo of operations came Mar. 29 when 16 Vietnamese piloted fighter-bombers made the first night air raid of the war against a Viet Cong staging and training area 350 mi. north of here near the Laotian border. Large quantities of napalm and white phosphorus fire bombs and 50,000 lb. of other bombs were dumped on the area.

U. S. military advisers here are optimistic that extending the war beyond the borders, plus a stable government

in Saigon, will force the Communist insurgency to collapse in a year. These advisers have long felt that this Southeast Asian war could never be better than a frustrating standoff unless South Vietnam took the offensive against the support lines of the Viet Cong.

One of the most striking developments in the situation here is the role of aviation as a vital force in preventing the military collapse of South Vietnam during the frequent periods of political upheaval. The relatively small combat and air lift support force has effectively countered the Viet Cong's advantages in surprise and in numbers of troops.

The force of U. S. military aircraft here consists of about 80 fighters and fighter bombers, 200 logistics support aircraft, and 500 helicopters and light aircraft. This force is augmented by an estimated 200 aircraft operated by Air America.

The tactical combat force is made up of about 55 North American T-28s, 15 Douglas A-1H Skyraiders and 10 Douglas B-26s. The B-26s are being removed from service because of obsolescence, and additional Skyraiders will be sent to Vietnam.

The logistics support force consists of Douglas C-47s and C-54s, Curtiss C-46s, Fairchild C-123s and de Havilland CV-2B Caribous and U-1A Otters.

Remainder of the military force consists of Bell UH-1Bs, Sikorsky H-19s and H-34s, Grumman OV-1 Mohawks, Cessna O-1E Bird Dogs and Helio U-10s.

U. S. also has learned that airborne weapons—machine guns, bombs, rockets and napalm—have been effective in supporting troop landings and movements, but that they are of little value against Viet Cong positions in swamps and mountain caves.

The course of both air and ground actions is tied irrevocably to the political situation, and what has appeared to be indecision by the U. S. to win the war is really a reflection of the political instability that preceded the regime of Khanh.

Unlike the government of Premier Ngo Dinh Diem, which flouted U. S. advice while accepting dollar aid, Gen. Khanh has won the confidence of U. S. military and political leaders. McNamara made it a point to be in Gen. Khanh's company in public appearances during his visit here in March, thus demonstrating to the population that the U. S. is backing the government.

U. S. has contributed to the previous confusion in Saigon. When Ambassador Henry Cabot Lodge arrived here last August, he found an embassy staff so engrossed with military operations that it had little time to provide political advice. Army Gen. Paul D. Harkins has since been given command of the special forces and aircraft, leaving Lodge free to handle the delicate task of advising the Khanh government in organizing its administration and helping stabilize the political structure.

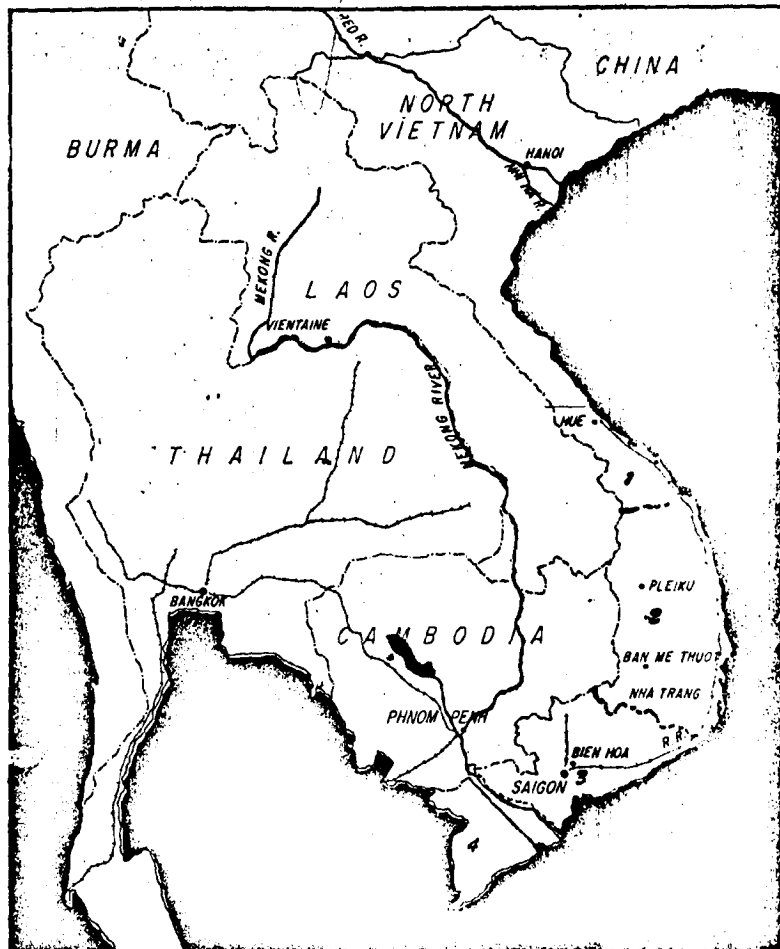
The elite corps of special forces is providing the basis for new optimism that this war can be won in a year, and that the number of U. S. military advisers here can be cut significantly in the near future.

Special forces, which now constitute one-tenth of the half-million South Vietnamese under arms, are essentially airborne troops not connected with any

Value of Vietnam

Washington — U. S. believes that Southeast Asia has vital strategic significance. It is located across the principal east-west air and sea lanes in the Orient and flanks India on one side and Australia, New Zealand and the Philippines on the other. It also dominates the entrance to the Pacific Ocean from southern Asia, Africa and the Middle East.

Defense Secretary Robert S. McNamara said that for this reason, "To defend Southeast Asia, we must meet the challenge in South Vietnam." In Communist hands, he said, this area would pose a serious threat to the security of the U. S.



SOUTHEAST ASIA has been described by Defense Secretary Robert S. McNamara as of great strategic importance to the United States because its location on the east-west sea and air lanes flanks India, Australia and the Philippines and is the gateway to the Pacific.

formal military organization. They rely on Air America to air lift them to the site of operations, supply them and return them to their bases.

In its open operations Air America is a parent company of the Civil Air Transport (CAT) airline and operates contract air lift through its own name and that of Southern Air Transport.

But in its covert operations, Air America uses numerous secret airstrips in South Vietnam and Thailand.

To a smaller extent Byrd and Sons, a company otherwise unidentifiable, is performing similar missions.

Hub of Air America's activities in Southeast Asia—open and secret—is Don Muang airport at Bangkok, Thailand. It is the site of its major overhaul activity. A secondary maintenance base is at Taon Sun Nhut airport here.

Southern Laos, the principal pathway for reinforcements from North Vietnam to South Vietnam, is only 125 mi. wide. By operating from fields in Eastern Thailand and from the northern part of South Vietnam, Air America can penetrate to the interior of Laos on relatively short flights.

Usual technique in penetrating a new area is to parachute a few troops who are natives of the region, to make initial contact with the tribe or village. They receive supplies by air drop. Later, more special forces troops are parachuted and with native help, they clear a landing strip. Village becomes a base of operation from which supply routes are hit. Establishing such a base may take as long as three months.

Most first landings are made from Helio U-10B STOL aircraft. Later air lifts and continuing supply runs are usually made with C-47 and C-46 transports. Other aircraft being used for these operations by Air America are the CV-2B and U-1A Otter and the H-34 helicopter.

Pilots of Air America are hired at a basic salary of \$12,000 per year with most living expenses furnished. Most of them are former U. S. military pilots. If they fulfill a two-year contract, they receive an \$8,000 bonus. Bonuses also are paid for extra risk missions. Pilots who sign a second contract receive substantial salary increases.

Air America has been flying in Laos

under charter to the United States Aid Mission in Vientiane. Much of this work consisted of hauling medicines, food and clothing to refugees of the Laotian civil war. On Mar. 18, after protests by the Communist Pathet Lao that Air America was mixing its relief air lift with military airlift, Seaboard World Services, a subsidiary of Seaboard World Airlines, was hired for the refugee air lift job. Seaboard will employ Air America personnel and manage its equipment.

With Air America supporting most over-the-border operations, military pilots perform these basic missions in South Vietnam:

- **U.S. Air Force.** Major USAF task is heavy air lift. Externally, Military Air Transport Service is the pipeline from the U.S. Internally it is the three squadrons of the Second Air Division flying C-123s. Some C-123s are being used for combat air lift to small landing strips. USAF pilots are flying combat support in T-28s but are gradually being replaced by Vietnamese pilots. Air commando pilots are flying U-10 planes in missions similar to those of Air America. USAF furnishes forward air controllers in O-1E aircraft for air strikes.

- **Vietnamese Air Force.** Most T-28s and all A-1Hs are being flown by VNAF pilots on attack missions. They are now operating H-19 and H-34 helicopters, and are flying light aircraft on reconnaissance and liaison missions.

- **U.S. Army.** The major helicopter force belongs to the Army. After May 1 the only Army helicopter will be the UH-1B as the Vertol CH-21 is phased out. About one third of the UH-1Bs are armed with machine guns and rockets for close troop support. The other two thirds carry troops and supplies into

combat. The Army is also operating Bird Dogs, U-1As and OV-1s on liaison, reconnaissance and target marking missions. CV-2Bs carry troops and cargo on combat missions.

- **U. S. Marine Corps.** One large squadron of H-34 troop-carrying helicopters is operating on combat missions in the northern mountain regions.

Despite the continuing controversy over its value, the armed helicopter has proved itself as an escort on troop landing missions. Helicopters are used on all assault operations to hit hard-to-see targets that might be missed by the fixed wing aircraft making the first heavy strikes. In many instances flights in the mountain areas by the Marines and Army are made in low ceiling weather that grounds fixed wing aircraft. In that case the UH-1Bs provide the only armed escort (see p. 19).

Most tactical aerial reconnaissance in the South Vietnam theater of operations is being done by light aircraft, aided by helicopters and a few OV-1s.

Strategic photo-reconnaissance in Southeast Asia is being flown by McDonnell RF-101s, Martin RB-57s, Douglas RB-66s and Lockheed U-2s. All but the U-2s stage from Taon Son Nhut and Don Muang airfields. The U-2s operate at Bien Hoa, 26 mi. north-east of here. All these USAF reconnaissance aircraft have their rear echelon base at Clark AFB in the Philippines. Whenever attack carriers of the U.S. Seventh Fleet are in the area their photo-reconnaissance fighters augment the USAF flights.

Last fall when U.S. officials decided that it was impossible to win the war by confining it inside South Vietnamese borders, they began an expanded program of training the special guerrilla forces at secret bases. Courses emphasize techniques in operating beyond national borders.

These borders, artificially created, mean nothing to local populations who conduct their trade by tribal and regional traditions. The Communists from North Vietnam have taken advantage of these traditions by winning over tribes and villages with promises of improved trade and better government. These tribes in turn allow free passage of weapons and troops through their areas.

Now the South Vietnamese special forces are learning to play the same game.

Training of Vietnamese military forces is beginning to show results. VNAF pilots are now flying most of the tactical support missions and will be flying all strike missions by the end of this year. They are being trained to fly H-34 helicopters and will be able to relieve the Marines in this aircraft by October.

Primary flight training for VNAF

Communist Strategy

Saigon—War in South Vietnam is the second phase of the Chinese Communist attempt to control the strategic Indo-China Peninsula. First phase was the defeat of the French in North Vietnam in 1954 which resulted in the partition of the country and establishment of a Communist government ruling the northern sector from its capital at Hanoi.

Communist aim in South Vietnam is to infiltrate the country with guerrillas and Viet Cong troops trained in North Vietnam and armed with Chinese-manufactured equipment to eventually wrest control from the Saigon government. The Viet Cong operations in South Vietnam depend on a constant flow of troops, arms, ammunition and other equipment from China and North Vietnam.

Viet Cong forces now in South Vietnam are estimated at about 50,000 hard core troops augmented by local sympathizers carrying arms. Saigon government forces opposing them consist of about 125,000 regular army troops; 50,000 special forces troops and about 325,000 local militia. U.S. has about 15,500 military personnel in South Vietnam as advisers and instructors for the government forces. U.S. personnel also operate the air lift operations and fly the armed helicopters.

pilots will be taken over by the VNAF July 1, under present plans.

Army training is slower, but an increasing number of Vietnamese officers are taking over training duties. U.S. officials say that the U.S. military figure of 15,500 in South Vietnam can be reduced by about 1,000 soon because of this shift of training programs.

Military men here concede that there is no need for a great increase in the number of aircraft needed to fight the war. There is a high rate of usage for those planes now on hand but almost all requirements for missions are being filled. McNamara has promised that increased help from the U.S. "will include strengthening of the Vietnamese Air Force with better aircraft." So far this planning has included adding only 15 A-1E two-place attack aircraft to the VNAF. Otherwise, it means that as more pilots are trained more aircraft will be transferred from the USAF, increasing the aircraft inventory of the VNAF.

The use of obsolescent aircraft and weapons here has been the target of criticism of U.S. military officers. A U.S. officer told AVIATION WEEK & SPACE TECHNOLOGY that the long term aim is to turn over all equipment and weapons to the South Vietnamese.

Air operations in South Vietnam are characterized by these factors:

Options in Vietnam

Washington — Secretary of Defense Robert S. McNamara "totally rejects" any suggestions that the United States withdraw from Southeast Asia. In a speech Mar. 26 he defined four options open to President Lyndon B. Johnson regarding Vietnam. One was withdrawal. Another was to sign a treaty agreeing to the neutralization of South Vietnam. "We have learned from the past that the Communists rarely honor the kind of treaty that runs counter to their compulsion to expand," was his answer to that one. A third option is carrying the war beyond the borders of South Vietnam is being studied, he said. There is evidence that this option is being already exercised (see story). The fourth choice is helping the South Vietnamese win the battle in their own country, which McNamara said is essential.

• Communist ground fire has increased, but the turbine-powered UH-1B has proved its ability to survive small arms fire. Casualty rates for rotary wing and fixed wing aircraft have remained constant at an acceptably low figure for the number of hours and missions flown.

• Weapons used are World War 2 and Korean vintage. More modern anti-personnel weapons have been developed, such as Lazy Dog, a small finned projectile that can be dispensed by guns and rockets. However, diplomatic officials claim that such a weapon has such devastating effects that it would cause unfavorable political reactions. Defense officials also oppose its use.

• Major handicap in air operations in South Vietnam is the dual control system in which one-half controls USAF and VNAF aircraft and the other controls U. S. Army aircraft and Vietnamese Army units. The split creates extra coordination at the four corps headquarters where operations are planned and controlled, but no satisfactory reason for the split has been given.

Armed Helicopters

Washington — Gen. Wallace M. Greene, commandant of the Marine Corps, believes the armed helicopter is an inadequate substitute for the close troop support that Marine fixed wing aircraft could provide.

In a recent speech here he said that despite the fact that armed Bell UH-1B helicopters are escorting Marine Sikorsky H-34 aircraft in South Vietnam, "We have found no reason to change basic Marine Corps concepts of helicopter tactics and close air support."

A Marine troop-carrying helicopter squadron operating in the mountains of South Vietnam has encountered weather conditions that ground fixed wing airplanes, leaving only UH-1Bs to furnish escort (see story).

• Working and operating conditions for air units are modern and relatively clean. Efficient pipelines provide rapid resupply of aircraft parts.

There is little chance that the air-

craft now in South Vietnam will be augmented or replaced by more advanced aircraft. Defense Dept. officials believe that at this stage the fledgling Vietnamese Air Force does not have the trained people to operate and maintain anything more advanced than those they now have.

These DOD officials believe that augmenting the VNAF would cause Russia to retaliate with modern aircraft for the Viet Cong.

Thus, the long term outlook for the VNAF is that it will retain the same kinds of aircraft and will gain slightly in numbers. In the meantime the training programs will enable it to take over all attack operations and H-19 and H-34 helicopter missions by the end of the year. Whether the fleet of transport aircraft operated by VNAF will be expanded beyond the current C-47s and C-54s to include C-123s has not been decided. Since the UH-1B and the CV-2B are modern aircraft in the U. S. Army's inventory it is not likely that these will be turned over to the VNAF for operations in its air war.

USAF Expands East German Buffer Zone

Wiesbaden—New measures designed to prevent accidental flights over East Germany by U. S. military aircraft have been placed in force while a United States Air Forces in Europe board of inquiry continues its investigation of the recent shooting down of a USAF RB-66 which has been tentatively blamed in part upon a faulty navigation compass and the "inability of the crew to recognize this malfunction."

In one move, a 70-mi. wide buffer zone has been established along the East German border, and voice approval from the ground must be granted before any military aircraft ventures into the area whether or not it has received prior flight plan approval to do so.

The new buffer essentially is an ex-

tension of the years-old Air Defense Identification Zone (ADIZ), whose distance from the East German frontier varies but averages out to approximately 25 mi. Formerly, pilots flying into the ADIZ could do so without obtaining radio approval from the ground immediately prior to penetration if such a move had been included in their flight plan, according to a USAFE spokesman. As in the case of the ADIZ, all military aircraft in the 70-mi. zone will be under direct supervision of ground radar controllers while in the area and presumably more responsive to warnings.

The step is one Washington-dictated move to attempt to avoid unauthorized overflights which have resulted in the loss of two USAF aircraft since the first of the year—a North American L-39 jet trainer in January and the Douglas RB-66 aircraft early last month.

The RB-66, flying from Toul-Rosieres Air Base in France, was attached to the 10th Tactical Reconnaissance Wing headquarters at Alconbury Air Base, England. The commander of the 10th, Col. Arthur Small, subsequently was reassigned to the post of deputy chief of staff for operations of the 17th Air Force at Ramstein Air Base, Germany, on Mar. 25, or 10 days after the incident. USAFE spokesmen last week were permitted only to describe Col. Small's new assignment plus the fact that his replacement as commander of the 10th wing is Col. DeWitt Spain.

A Soviet spokesman has challenged

the U. S. contention that the penetration was accidental. He said the RB-66 crew was in two-way radio contact with USAF ground stations up until they were shot down about 50 mi. inside East Germany, and that the men knew where they were.

The three crewmen, one injured when they parachuted from their aircraft, have been returned to U. S. authorities in West Germany.

Comsat Studies

Communications Satellite Corp. was negotiating contracts last week for two concurrent studies of its basic communications satellite system. The studies will be conducted by a team of American Telephone & Telegraph Co. and Radio Corp. of America assisted by General Electric, and a team headed by TRW Space Technology Laboratories with International Telephone & Telegraph.

The AT&T-RCA team will study the so-called random-random medium altitude communications satellite system while STL-ITT will investigate a phased-random medium altitude system. Other proposals in the corporation's competition for its basic system were submitted by Philco Corp. and Hughes Aircraft Co.

Hughes has been picked to develop a synchronous orbit system, known as Early Bird, which the corporation plans to place in orbit next year. The medium altitude system is expected to follow Early Bird not later than 1966.

Squirt Test Series

Martin/Orlando recently began firing a new series of high acceleration test vehicles at White Sands Missile Range, N. M., to gather data to be used in design of the Nike-X weapon system's Sprint low altitude anti-missile missile.

Designated Squirt, the test vehicles are primarily to provide thermal evaluation and other data on materials. The vehicles, which are being assembled by Martin under its subcontract from Bell Telephone Laboratories on the Sprint, are two-stage, solid propellant missiles powered by Recruit and Cherokee rocket motors—off-the-shelf units produced by Thiokol (AW Mar. 16, p. 198).