

GLIDERS FROM THE PANAMA JUNGLE TO THE BURMESE JUNGLE

During World War 2, Panama played host to a force of paratroops and airborne infantry, available should such a force be required to suppress any Axis-friendly uprising (or one unfriendly to the US and its allies), and was readied at one point to land on the Vichy-controlled island of Martinique. However, this force was not required, with the troops being eventually being redeployed to more active theatres.¹

The units involved included the 550th Airborne Infantry Battalion. This was an air landing unit, the first in the US Army, rather than a parachute or glider landing unit. It was formed as a direct response to the German air-landing approach used in Crete in 1941. Formed at Fort Kobbe on 1 July 1941, it was redesignated the 550th Glider Infantry Battalion in 1943 and departed Panama for Sicily, where it trained in preparation for the invasion of Southern France (Operation *Dragoon*) in 1944.²

Separately, a US Army officer had been undertaking experiments that would lead to his being recalled to the US and then sent to Burma, to take part in one of the most innovative and daring operations of the war. These too included airborne forces. Major William H Taylor had been experimenting with jungle landings of troop-carrying gliders in the Panama jungle during 1943-44.

These experiments appear to have involve a troop-carrying glider assigned to the 1st Reconnaissance Squadron in 1943, which would be towed by a Douglas C-47 Skytrain transport of the 20th Troop Carrier Squadron. This was believed to have been the only known glider operations undertaken by the USAAF in the Central American/Caribbean region during the war. One former pilot with the Sixth Air Force based in Panama is quoted as saying that the prospect of "*landing the CG-4A someplace in Panama was*

¹ For more on these topics, see <https://raytodd.blog/2025/10/10/panama-in-world-war-2-the-striking-force-martinique-and-gliders-in-the-jungle/> and <https://raytodd.blog/2026/02/16/panama-in-world-war-2-martinique/>

² <https://www.facebook.com/17thScions/posts/the-us-army-airbornes-first-air-landing-unit-the-550th-1abthe-united-states-army/1229476069220446/>

unthinkable".³ At the time, Panama, including the Canal Zone, was much less developed than now, when there remains extensive areas of dense jungle and, combined with the mountainous regions and the dangerous animals in the wild areas (including crocodiles and jaguars, not to mention the snakes and insects), once can see his point.

Troop-carrying gliders were purely a World War 2 weapon, and by the time of the Korean War in the 1950s helicopters had begun to displace them as an air assault vehicle.⁴ Seen as at least semi-expendable, they would be built of inexpensive and non-strategic materials, with weight being a crucial factor. Britain had only begun developing glider operations in 1940, following early German successes, with the US following in 1941 – and by the end of the war it would have produced over 14,000 gliders and trained over 6,000 pilots.

The glider employed in Panama, and subsequently in Burma, was the Waco CG-4A

Hadrian, and by both naming 13,000 (and 22 biggest



the most widely-used troop-carrying cargo glider of the war. It was used the US and British forces (the latter it the Hadrian), with more than built by no less than 16 companies subcontractors) – Ford being the producer, Waco itself only making

just over 1,000. It was built of wood and metal and was fabric-covered, with two pilots and able to carry 13 troops, or a Jeep, light artillery or other equipment. It was usually towed by a C-47 Dakota transport aircraft (n.b. it was prominently featured in the film "*A Bridge Too Far*" about the Arnhem operation).⁵ The Burma operation would be the first combat use of the CG-4.⁶

³ *Alae Supra Canalem: Wings Over the Canal* by Dan Hagedorn (Turner Publishing, 1995).

⁴ Glider operations were dropped from US Army capabilities in 1953.

<https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/196272/waco-cg-4a-hadrian/>

⁵ <https://www.aahs-online.org/pubs/journals/files/464270.pdf>

⁶ 150 were diverted in their supply to Britain, and shipped in *Liberty* ships to India.

While Major Taylor was busy with his hazardous experiments in Panama, British Empire and Chinese troops were defending India from Japanese troops which had invaded and occupied Malaya, Singapore and Burma (all then part of the British Empire), reaching the borders of India. One of the elements of the fighting was use of the Chindits, a force deployed far behind enemy lines to disrupt Japanese supply lines, and more correctly known as the Long Penetration Force.⁷

The name “chindit” was derived from the *chinthe*, a Burmese mythical creature resembling a lion and a temple guardian. The first Chindit operation had been launched in February 1943, and the second operation, in March 1944, would involve Major Taylor and some of the methods he had evolved in the Panamanian jungle.

The man behind the Chindits was Brigadier Orde Wingate (a British Army officer usually described as “unorthodox”), who would lead both operations,⁸ and who had trained the force in commando methods, preparing them for jungle fighting, sabotage, and air supply dropping.⁹

In February-June 1943, Wingate had taken a brigade of some 3,000 men on foot into Burma,¹⁰ using mules and with limited air support.¹¹ While two of the three columns were ambushed and had to return to India, the one that got through did disrupt supply lines, particularly the railway. All told, the survivors would have marched around 1,000 miles by the time they returned, again on foot, to India. One of the many problems they had faced was the limited amount of resupply could be provided by air, and the

⁷ For who and what comprised the Chindits, see <https://chindits.info/>

⁸ Wingate had arrived in India as a colonel in March 1942, after carrying out successful guerrilla operations in Palestine and Abyssinia.

⁹ <https://chindits.info/>

¹⁰ The 77th Indian Infantry Brigade – the Brigade was mostly comprised of British and Indian Army, and Gurkha troops, with some Burmese.

¹¹ Codenamed Operation *Loincloth*.

inability to evacuate sick and wounded men.¹² 27% of the original force were lost, and many of those that did return were found unfit for service due to illness and disease.¹³

However, the first operation was seen as a success – including in terms of morale and propaganda, and had proven that such a mission, particularly if more adequately supported, could seriously disrupt Japanese operations in Burma. As a result, Wingate was ordered to raise a new division of five brigades, which could be used to support the Nationalist Chinese army commanded by US General “Vinegar Joe” Stilwell,¹⁴ and help reopen the Burma Road for supplies to China.

Churchill took Wingate, now a major general, to the Quadrant Conference of Allied leaders in Quebec in August 1943. Wingate addressed Roosevelt, Churchill and their Combined Chiefs of Staff on the tactics used in Burma and convinced them that his methods could be used, albeit on a larger scale, to reopen the land route to China.¹⁵

Following the meeting, the US agreed to provide Wingate an air component capable of resupply, infiltration, evacuation, and fire support. The head of the US Army Air Forces (USAAF), General Hap Arnold, considered the glider a perfect aircraft for Wingate’s needs and sought to quickly organise and deploy an air component. He assigned Colonel Philip C Cochran, a fighter pilot who had seen action in North Africa, as commander of what was codenamed “Project 9”, with, as second-in-command, Colonel John R Alison, another fighter pilot and one who had seen combat against the Japanese. These two men would run what became known initially as the “Project 9 Task Force”.¹⁶

¹² *“In 1944 General Wingate wished to lead another expedition into Burma on a larger scale. Previously he had to leave some of his sick and wounded behind his swiftly moving columns, but in 1944 he wanted to fly all of them to safety”*. – General HH “Hap” Arnold in 1944

<https://www.cbi-theater.com/invasion/invasion.html>

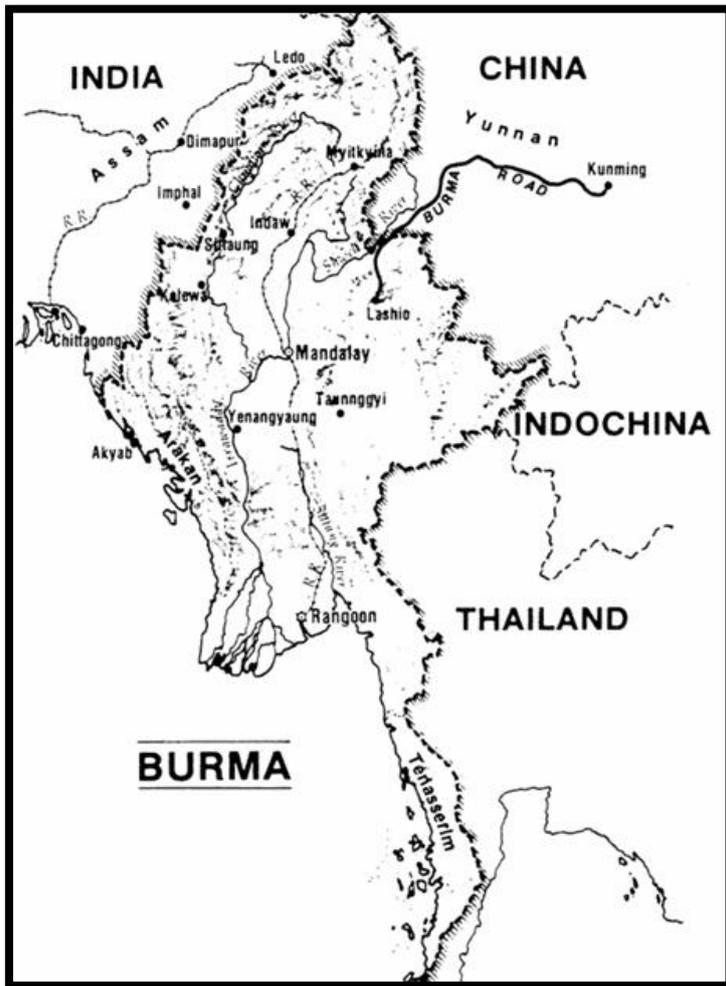
¹³ <https://lordslibrary.parliament.uk/vj-day-75-role-of-the-chindits-in-the-burma-campaign/>

¹⁴ There were very limited numbers of US troops in the Burmese theatre of operations. However, the USAAF Tenth Air Force had begun operating in India in March 1942. Stilwell’s force was a Chinese army. In 1944, the 5307th Composite Unit (Provisional) of the US Army – around 3,000 men, better known as “Merrill’s Marauders”, would also be involved in northern Burma. Like the Chindits, this engaged in long-range penetration operations.

<https://history.army.mil/portals/143/Images/Publications/catalog/100-4.pdf>

¹⁵ Ibid.

¹⁶ <https://www.ww2gp.org/burma/docs/AFD-051228-015.pdf>



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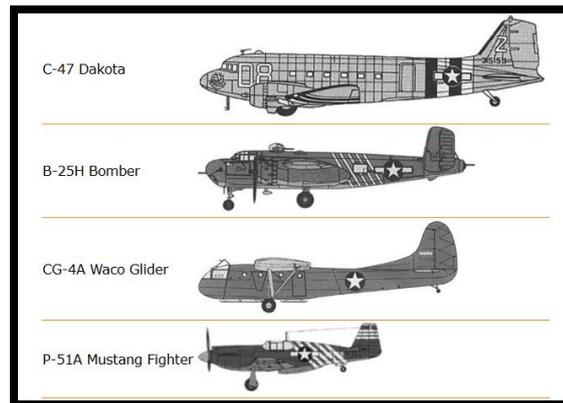
Along with other aircraft (see boxes below),¹⁸ Cochran acquired 100 CG-4A combat gliders and pilots. Wingate saw glider-borne forces and their equipment as a means of rapidly inserting ground troops, then clearing jungle airstrips for larger transports, and evacuating wounded using the transports or the gliders.

<https://ww2gp.org/burma/>

¹⁷ <https://www.ww2gp.org/burma/docs/AFD-051228-015.pdf>

¹⁸ <https://www.ww2gp.org/burma/docs/AFD-051228-015.pdf>

Air Power for Project 9	
Troop gliders (CG-4A)	150
Light planes (L-1/L-5)	100
Fighters (P-51A)	30
Training gliders (TG-5)	25
Large transports (C-47)	13
Small transports (UC-64)	12
Bombers (B-25H)	12
Helicopters (YR-4)	6
Total	348



All the men of Project 9, including the glider pilots, were volunteers. The air support would comprise three elements – the initial airlift with transport aircraft and gliders (the transports would include the ubiquitous C-47, which would also be used to tow the gliders); a fighters and bombers to provide close air support during the mission; and lightplanes for evacuation, communications etc.¹⁹ Subsequently, the gliders would bring in bulldozers, allowing clearance of proper landing strips that C-47 transport aircraft could use.²⁰



Wingate and Cochran

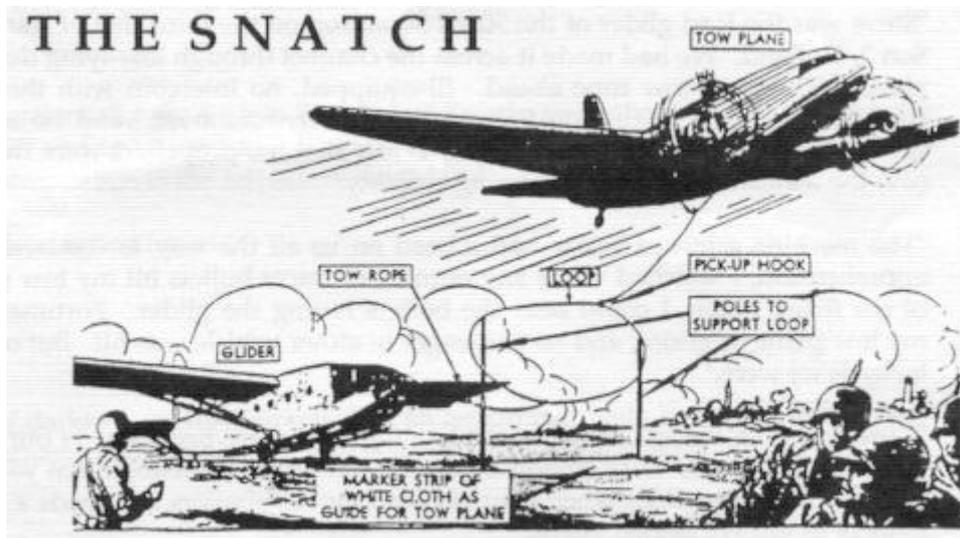
An obvious problem with evacuating wounded from the jungle using the gliders was just how to get the glider into the air. There may not be the suitable length of necessary runway for a conventional towed take-off. However, US glider pilots had developed such a suitable technique.

Engineers had developed a glider recovery technique termed “the snatch” – this involving a dangerous operation where the tug aircraft used, normally a Douglas C-47 or a C-54 transport, extended a steel cable with a hook on the end to catch the glider’s towline. The glider ground station had two poles with the towline looped tightly between them. The tug aircraft flew slow and low enough (around 20 feet or 6 metres) to allow its

¹⁹ Ibid.

²⁰ <https://www.cbi-theater.com/invasion/invasion.html>

hook to grab the towline held in a frame about 12 feet (3.6 metres) above the ground. As the tug continued forward, the slack in the towline tightened pulling the glider in the air.²¹



One notable novelty for the operation in Burma would be that six Sikorsky YR-4B helicopters were included in Project 9. While these early helicopters were of limited range and payload,²³ their presence was a harbinger of their later use in such jungle operations – in Vietnam, Indonesia and Malaya, amongst other places – and to take on the troop-landing role performed by the gliders.²⁴ As with the CG-4 Hadrian, this

²¹ During the war, the USAAF would execute 485 such glider retrievals, with 59 in the China-Burman-India theatre.

<https://www.ww2gp.org/gliderpickup/>

Wingate insisted on being aboard the first glider to be picked up in tests.

<https://www.ww2gp.org/burma/docs/AFD-051228-015.pdf>

²² <https://www.ww2gp.org/gliderpickup/>

²³ Theoretically, it could carry a pilot and passenger at 65 mph (104 kmh) for about 100 miles (160 km). However, the high heat and humidity found in Burma would affect its performance significantly.

One helicopter was lost before the operation began, when the transport carrying it crashed.

²⁴ The commanders of Project 9 had heard of this new type being tested by the USAAF at Wright Field in the US, and three examples from the USAAF and three from the Navy were supplied, on condition that the force would report back on the type's performance in the field.

would be the first combat use of the YR-4.²⁵ Its first use in actual combat took place in April 1944, when one was used to rescue the pilot and three wounded British troops from a crashed L-1 Vigilant lightplane. The unit flew 20 more rescues, and several other YR-4B would be used in rescues by US forces in other areas before the war ended, but it was only in Burma that they were used in combat conditions.²⁶



A YR-4A of the 1st Air Commando in India in 1944²⁷

In 1944, Wingate received orders to use the new forces against the Japanese in Burma, and to interdict the flow of supplies for Japanese units that were opposing General Stillwell's First Chinese Army.

Cochran picked Major William H Taylor, the glider pilot who had conducted experimental jungle landings with the CG-4A in Panama, to be the commander of his glider detachment.²⁸ He sent Taylor to the advanced glider school to interview personally the pilots who had volunteered for the then secret mission.²⁹ In selecting his pilots Taylor gave weight to experience and those pilots who had graduated from the glider mechanic school – as this could prove vital in remote jungle conditions. Taylor told each of the volunteers that they would return home from this secret mission as either a dead glider pilot or live hero. Training emphasised night operations including formation flying, landing, and glider retrieval and, after completing glider pilot training, the volunteer pilots moved to Seymour Johnson Field for six weeks'

<https://www.smithsonianmag.com/air-space-magazine/helicopter-goes-to-war-180972605/>

²⁵ <https://www.smithsonianmag.com/air-space-magazine/helicopter-goes-to-war-180972605/>

²⁶ Ibid.

²⁷ <https://www.smithsonianmag.com/air-space-magazine/helicopter-goes-to-war-180972605/>

²⁸ The Glider section of the 5318th Provisional Unit (Air) of the Tenth Air Force,

²⁹ All members of the operation were volunteers – 87 officers and 423 enlisted men.

commando training (including hand-to-hand combat, 25-mile (40 km) marches in full gear, and weapons qualification).

Among the glider pilots selected was John L “Jackie” Coogan, from a vaudeville family, a former Hollywood child movie star, and an ex-husband of pin-up Betty Grable. He would go on to lead a 12-glider formation in the Burma operation. He found fame again postwar, as Uncle Fester in “The Adams Family” TV series of the 1960s.³⁰



The eventual mission was to begin in March 1944, with Wingate’s forces to rely on the US 1st Commando Group (as Project 9 had become) for aerial resupply. The glider element was Operation *Thursday*. It would involve 80 gliders landing at two separate landing zones at night in small clearings in the middle of the jungle.³¹

A shortage of pilots complicated the planning as, never expecting a large-scale glider operation, Cochran and Taylor had only recruited and trained 100 glider pilots. Thus, each glider flew and landed with only one pilot at the controls.

Despite problems (overweight gliders causing tow lines to snap, and hidden ruts on the landing areas that damaged the gliders on landing),³² the glider operation was a success. In six days, 9,052 troops, 175 ponies, 1,183 mules³³ and 509,082 lb (231

³⁰ <https://www.britannica.com/biography/Jackie-Coogan>
https://www.ww2gp.org/burma/Coogan_chowringhee.pdf

³¹ For more detail of the landing and fighting, see <https://www.ww2gp.org/burma/docs/AFD-051228-015.pdf>

³² Though intended to be theoretically recoverable (using, if necessary, the “snatch” method), only three of the gliders used in the initial landings were undamaged.

³³ For a fascinating piece on transporting mules in gliders, see <https://www.ww2gp.org/burma/FlyingMulesCBI.pdf>

tonnes) of supplies were flown over 150 miles into Japanese-held ground. However, damage caused meant that only three gliders were capable of being retrieved for reuse.³⁴

Taylor took part in Operation *Thursday*, piloting one of the gliders in a “pathfinder” role. He received a Distinguished service Order for his role.

General Wingate had told me in Burma that without the gliders and the skill and courage of their pilots he could not have carried on that operation. From our experiences we learned a lot lessons, which I took to England for use in the invasion of France.

Major William H Taylor. Commander, Glider Pilots (CBI Theatre)³⁵

Ray Todd

Panama City

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6 March 2026

Postscript: Sadly, I have been unable to find anything more about Major Taylor and the exact nature of the experiments in Panama. An author who has written on glider operations during World War 2, and knows far more than me about the topic, has said she has faced the same problem. So, if anyone reading this knows more, then we both would be glad to hear from them.

In the jungles of Burma, mules were still invaluable for moving supplies, and heavier weapons, the troops having enough to carry with their own kit, weapons, ammunition etc. They were also used, until at least 1941, in Panama by the Mobile Force defending the Canal, Panama then being far less developed than today. The Mobile Force used the same 75 mm Pack Howitzers as were used in Burma, these being capable of being broken down and carried by mules.

³⁴ *Gliders of World War II: “The Bastards No One Wanted”* by Michael H Manion (a thesis presented to the School of Advanced Air and Space Studies, Air University, Maxwell AFB, 2008)

<https://apps.dtic.mil/sti/tr/pdf/ADA493762.pdf>

³⁵ <https://apps.dtic.mil/sti/tr/pdf/ADA493762.pdf>