

Hangar Digest

VOLUME 4, ISSUE 2

APRIL 2004

INSIDE THIS ISSUE:

Cruisin' with Jim	2
Meet the Volunteer	3
Airlifts Remembered	4
Hall of Heroes	6
Name the Plane	8
Artifact Facts	9
Around the Bases	10

From The Editor

This issue's "Around the Bases" highlights Lajes Field on the Island of Terceira in the Azores. For those of you that have transited Lajes, I hope this retrospective will bring back some fond memories of the steak and eggs, Portuguese rolls, the bottles of Mateus Rose', street bullfights in Praia and the crew alerts that seemed to come just after we settled into bed.



In the next issue, I will begin the series "Airlift Legends" a reflection of those foresighted pioneers that were instrumental in building the most diverse and far-reaching mission of the United States Air Force.

Mark you calendars for Dover's Air Show "A Celebration of Freedom", May 15th and 16th, featuring the Air Force Thunderbirds.

A correction: The initial assignment of our Convair F-106A, noted in the last issue's "Museum Aircraft of the Quarter," should have read; "the 319th FIS located at Bunker Hill AFB, Indiana." Bunker Hill AFB was renamed Grissom AFB in May 1968 for astronaut Gus Grissom, a native of Indiana.

And finally, Arnold Cecchini, a member of our volunteer family since 1996, was killed when his vehicle skidded on an icy road in February. "Sid", as he was known, will be missed.

Harry E. Heist, **Editor**

From the Director

January and February are the slow months for the museum; that's when the staff gets some quiet time to plan exhibits and prepare for the upcoming season — yeah right!!

On the 2nd of February, a cold and icy day, a large group of museum staff members stood on the ramp scanning the skies for the signs of an approaching (Continued on the following page)

LOOKING BACK

The National Aeronautics and Space Administration and the Lockheed Georgia Company will study the feasibility of using the C-5 as a ferry vehicle for the space shuttle orbiter. Lockheed proposes joining two C-5s to create a six-engine Galaxy that would carry the orbiter cradled between the two fuselages. The right wing of one and the left wing of the other would be removed and a new center wing then would join the two aircraft.

Source: MAC Aircrew Newsletter, November 1973

From the Director

C-130. This is not a rare occurrence here at Dover AFB but the fact that this aircraft was making its final approach and landing to become part of the collection here at the AMC Museum was reason enough for all the excitement.

After the engines were stopped and chocks were in place, Colonel John Pray, 436th Airlift Wing Commander, along with museum board members retired Brigadier Generals Michael Quarnaccio and Richard Bundy were on hand to greet the 43rd Airlift Wing crew from Pope AFB. Arriving with the aircraft from Pope was Colonel Frank Laras, 43rd Airlift Wing Vice Commander; Colonel William Changose, 43rd Operations Group Commander and Colonel Howard Hemeon, 43rd Maintenance Group Commander. And, we were very happy to see the crew chief was a former Dover Maintainer, TSgt Duane Smith. Two weeks after the plane's arrival, we received a package from Duane with an original lithograph of the very same C-130. Lithographs will be available for purchase in the museum's gift shop. It is interesting to note that this aircraft was once assigned to the 61st Tactical Airlift Squadron, the descendent of the 61st Troop Carrier Squadron in which our C-47 served in World War II.

Some folks have asked about the winged creatures painted on both sides of the C-130's nose. They are Gryphons, or Griffins if you prefer — mythical creatures with the head, forelegs, wings of an eagle and the hindquarters, tail and the ears of a lion. As the Gryphon is a fearsome creature able to do many things, the C-130 is capable of many different jobs.

Few are aware that once an aircraft retires to a museum it takes approval at the highest level to cannibalize any of its parts for an aircraft that is actively assigned. You may wonder why it would not make sense to swap out a museum's aircraft part for one that is broken on an active airplane. There is a very good reason. Once a plane enters the museum inventory, the various pieces and parts are no longer tracked and updated as parts are on an active aircraft. If for example a hydraulic pump sits without being used, the seals crack and deteriorate. Radios are not updated and parts that look alike externally are not necessarily the same inside. However, there is a very small window of opportunity for critical items to be removed such as classified parts. Our C-130 is now safe from this process as a few classified parts were removed prior to its arrival. Otherwise, the aircraft is complete and in great shape.

On February 26th Exhibit Concepts installed our long awaited Air Refueling exhibit. It is truly an outstanding addition to the museum. Suspended from the exhibit's overhead railing are custom made models of past and present refueling airplanes crafted by museum volunteer Kevin Wysopal. Additional artifacts such as a KB-50's refueling reel will be added soon.

Looking forward to seeing you at the Air Show,

Mike

Cruisin' with the Curator

Please hold on to the bar! This episode first takes us to the south ramp for the arrival of our latest new kid on the block, HERKY BIRD 69-6580. I can't tell you how happy we all were to have a display plane "FLY" in. Its not that we tire of the day to day painstaking, repetitious, monotonous, never ending scraping of old paint, it's just once in a great while ain't it a sheer pleasure to shut down the engines, defuel and put the

(Continued on the following page)



Director Mike Leister accepting the C-130E from Colonel Frank Laras.

Cruisin' with the Curator (Cont.)

bird on display! Many thanks to the folks at Pope AFB for delivering a clean, outfitted aircraft. It was quite evident that TSgt Duane Smith took great pride in his plane. Ah, the mark of a good crew chief. A brief ceremony took place at planeside as another C-130 from Pope flew the crew of 6580 back home. The plane has been defueled and now sits proudly among our other airlifters.

Let's head over to the restoration hangar. Utilizing the new museum road and Route 9 sure is a move in the right direction. Now if we can only get it into the mindset of those who suffer from the RC factor (resistance to change) that it is only a half of a mile longer than going around perimeter road but is twice as fast due to the lack of stop signs and the faster speed on Route 113/1.

Okay, enough preaching. Here we are at Building 789 and it looks like Duffy is the first one on scene. Coffee better be ready. Lights all on, heat going and yes the coffee is ready. Atta boy Duff! Conversation reveals that Hank, Ed, Rich, Doc and the rest of the surgical team has worked on our newly acquired baking soda stripping machine. Report was that they had it up and running and that there was some media (not the news type) left in the tank and the guys shot a bit to see how effective the machine would be. Once we have the safety gear in place and have an ample amount of baking soda available, I anticipate that the restoration crew will be hard at it removing the paint from the Connie.

Speaking of the Connie, the crew has made substantial progress on the airplane working both the interior and exterior. The engine cowlings have been removed and the locks have been worked for proper operation. Some of the flooring has been replaced and a preliminary work plan has been discussed. This will be one of those projects that at times will seem like it isn't going anywhere and then, "BAM", it all falls into place.

Leaving the main gate and arriving back at the museum, I see that the contractors are busy with the installation of the air conditioning system for the hangar. The crane is preparing to place the cooling units on their footings. By the time you read this, I'm hoping that most of the work is complete and we'll be ready for the warmer weather. We now have the new doors and windows in place except for the front entrance door which arrived in the wrong configuration and must be rebuilt. Those units that have been installed have been trim painted by our resident landscaper, Smitty. Until there is some grass to cut and bushes to trim, he'll keep busy with these kinds of projects. It's what it is all about folks, our volunteers are always stepping forward and doing what needs to be done to keep us looking better. Who could ask for anything more? That's it..... Until next time.

Jim

Meet Museum Volunteer Tom Davis

Tom is a key member of the museum's KC-97 restoration team.

He entered the Air Force in 1948 and his first operational assignment was with the 509th Bomb Wing (SAC) stationed at Walker AFB in Roswell, New Mexico. From Roswell he went on to assignments at Biggs AFB at El Paso Texas; the 1254th Air Transport Group (Special Air Missions, Military Air Transport Service) at Washington National Airport and the 733rd Troop Carrier Squadron at Hill AFB, Utah.

Tom's interest in museum work began as a volunteer docent at the National Air and Space Museum's Paul E. Garber Preservation, Restoration and Storage Facility at Silver Hill, Maryland.

Tom hails from Salt Lake City, Utah retiring from the Air Force with the rank of Master Sergeant. He now resides in Denton, Maryland.



Airlifts Remembered: Operation Nickel Grass

THE BACKGROUND: Just as the United States was ending its massive involvement in Vietnam and reducing its force structure, the Military Airlift Command (MAC) was called upon to conduct a major wartime airlift in support of Israel. At approximately 2:00 pm on the afternoon of 6 October 1973, the day of Yom Kippur—the Jewish Day of Atonement, Egypt and Syria simultaneously attacked Israel in violation of the tenuous cease-fire that had existed between the three countries since the 1967 Arab-Israeli War. Desperately engaged in a war on two fronts, Israel quickly pressed all of its EL AL Airline commercial aircraft into service to ferry replacement war materials from the United States; however, these airlift resources were inadequate to transport the large amount of supplies needed, especially the outsized cargo. Intensifying the crisis, the Soviet Union began airlifting supplies to Egypt and Syria on 10 October.

THE AIRLIFT: In response to an urgent request from Israeli Prime Minister Golda Meir, President Richard M. Nixon initiated an aerial resupply operation to Israel starting on 13 October. Nicknamed NICKEL GRASS, the airlift soon proved the value of maintaining a responsive and efficient military airlift system. For the next 32 days, MAC C-141 and C-5 cargo transports streamed steadily into Lod International Airport at Tel Aviv, from onload points throughout the United States, carrying urgently needed war materials. The aerial resupply was conducted with an en route stop at Lajes Field in the Azores, approximately one half of the one-way distance of 6,450 nautical miles from the United States to Israel. Given the diplomatic sensitivities associated with so much of the world's dependence on Arab oil, the C-141 and the C-5 flight routes over the Mediterranean carefully avoided the airspace of all the nations in the region.

The first mission was completed when a C-5 landed at Lod Airport on 14 October with 186,200 pounds of cargo. To expedite the unloading operations of all the MAC aircraft arriving in Israel, another C-5 had been dispatched to Lod with material handling equipment and aerial port personnel. Unfortunately, it was forced to abort at Lajes for maintenance. As a result, the cargo aboard the first C-5 was unloaded manually by Israeli civilians and MAC crew members. The command's airlift planners scheduled the flights into Lod at the rate of four C-5 and twelve C-141 missions daily. The airlift flow peaked on 21 October with the arrival of six C-5s and twelve C-141s. Nine days later, 30 October, the intensity slackened as sealift began to take over the bulk of the resupply operation.

From the arrival of the first mission on 14 October, through the landing of the last aircraft at Lod on 14 November, MAC's combined force of C-5s and C-141s airlifted 22,318 tons of material to Israel. The delivery was completed in 567 missions and 18,414 hours of flying time. In 145 missions, the C-5s carried half of the tonnage and the C-141s moved 10,754 tons on 422 missions.

By the time the cease-fire was in place on 2 November, MAC's Israeli operation had outperformed the Soviet effort in resupplying Egypt and Syria. The Soviet Air Force used AN-12 and AN-22 transport aircraft to haul 15,000 tons on 935 missions. What made MAC's performance all the more noteworthy was that C-5s and C-141s had covered a one-way distance of 6,450 nautical miles compared with an average distance of 1,700 nautical miles flown by the Soviet transports.

Contributing so significantly to the success of Operation NICKEL GRASS was the C-5, which carried an average of 73 tons to the C-141's 28 tons. Additionally, the C-5 transported outsized cargo including 155mm howitzers, 175mm cannons, M-60 and M-48 battle tanks, Sikorsky CH-53D helicopters and McDonnell Douglas A-4 Skyhawk aircraft fuselages. No other USAF aircraft had that capability. NICKEL GRASS further constituted the first real test of the C-5 under wartime conditions.

While the Israeli Airlift confirmed the importance of the United States maintaining basing facilities at Lajes, it also renewed interest in developing the C-5's aerial refueling capability. Had the Portuguese not made Lajes available and with Germany, Spain, Greece and Turkey refusing aircraft landing rights, MAC would have been hard pressed to execute Operation NICKEL GRASS.

(Continued on the following page)

Airlifts Remembered (Cont.)

AN ACCOUNT BY THE EDITOR: On 6 October, as Israel was being attacked by Egyptian and Syrian forces, our C-5 crew was unloading materials at Patauxant Naval Air Station, Maryland for a trip that would take us across the Pacific Ocean to Anderson AFB on the Island of Guam. The Paris Peace Accords had ended the United States' direct military intervention in Vietnam, with the cease-fire agreement going into effect on 27 January 1973. However, the United States continued to provide assistance to counter North Vietnam's incursions into Cambodia, Laos and South Vietnam. Anderson AFB's location and its mission were critical in providing this assistance.

Our return trip took us via Hickam AFB, Hawaii arriving back at Dover on 14 October only to be met by the squadron's operation officer informing us to wash our flying suits, hug the wife and stand-by for a trip to Israel. In less than 36 hours I was on the ramp at Wright Patterson AFB, Ohio unloading cargo for Tel Aviv. During the period of 17 days I would fly four missions in support of Operation NICKEL GRASS ended only by maxing out my allowable flying time.

As with most new things, there were some problems with the C-5's sophisticated navigational systems. Although the C-5 had inertial navigation (very high-tech at the time) and Doppler, both were sometimes prone to failure and considered simply as just other aids to navigation. The C-5 did have a full compliment of navigation gear — sextant, loran, radar, etc. However, due to the constraints placed upon the aircrews (restricting the flyover of the airspace of the Mediterranean border countries) navigation from Lajes through the Mediterranean and into Israel at times became a bit hairy. I recall that on one mission we had minimum navigational aids, it was dark and we were approaching the Straits of Gibraltar. There is a ten mile gap between Gibraltar and the coast of Morocco and we were required to fly between the two with just five miles on each side of the center line. Normally the radar would get us through there OK but this time we had lost our radar and our other electronic navigational aids were unreliable at this location. With the aircraft's speed clocked in excess of Mach .78 (530 mph) and our altitude 5½ miles above the water, the coasts were approaching rapidly with no time to fix our position by celestial observation. I had the pilot look out of his window and the co-pilot out of his and I was sitting in the jump seat between the two of them as we flew down the center line visually sighting the ground lights on both coasts. Aided by radio fixes and with the help of the U.S. Navy's 6th Fleet, we approached the Eastern Mediterranean where we picked up our Israeli F-4 Phantom escort for a safe approach and landing at Lod Airport.

Regardless of the time of arrival at Lod, every aircraft was welcomed by very attractive EL AL Airline flight attendants who had prepared a brunch for the crew. Also, on every departure, each crew member received a flight lunch, sometimes more than one, usually with steak and plenty of fresh fruit. Souvenirs were also given to the crews and one that I received is in the museum's NICKEL GRASS exhibit.

My last trip into Lod was on 4 November and following two weeks at home I was again back in Southeast Asia at Utapao, Thailand.

Source: MAC History Office, *Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991*; Heist, Harry, *memoirs*

Photo: Tank off-loaded from a C-5 at Lod Airport, Tel Aviv



The Hall of Heroes

It was around midnight when the Rescue Center called the helicopter with instructions to return to Danang. The message was not well received by the Jolly Green Giant's crew. The aircraft commander, Captain Gerald O. Young, called the center back asking permission to continue with the mission as the backup to a primary recovery helicopter.

Captain Young's helicopter was part of a team that included another HH-3E, a C-130 flareship and three US Army helicopter gunships. The armada was headed toward Khe Sanh, a small city in the north-westernmost corner of South Vietnam.

That afternoon in the jungles to the southeast of Khe Sanh, a North Vietnamese Battalion had ambushed a small US-South Vietnamese reconnaissance team. Two helicopters were shot down attempting to rescue the survivors. As evening fell, the enemy felt certain that there would be another rescue attempt either that night or early the next morning. With the survivors as bait, they would lure the rescue force into their deadly trap again.

Shortly after midnight on 9 November 1967, the sounds of approaching aircraft brought feeling of hope to the survivors and anticipation to the North Vietnamese gunners. Flares from the C-130 cut through the darkness, illuminating the hillside below. Once again the rescue effort was underway.

Low clouds and poor visibility forced the choppers to operate within the range of the hostile guns and the enemy opened fire on the gunships. Reacting swiftly, the small helicopters evaded the withering fire and answered with a stream of rockets and machine gun fire. The two big Jollys hovered nearby waiting for a chance to make the pickup. Suddenly the ground fire ceased.

The gunships escorted the primary Jolly Green Giant into place alongside a steep slope when the hillside erupted into fire once more. The enemy gunners fired at close range from atop a nearby ridge and the hovering helicopter was an easy target in the ghostly flarelight. As three survivors clambered aboard, the Jolly broke out of the hover and wheeled away from the murderous barrage.

Leaking fuel, oil and hydraulic fluid, the bullet-riddled HH-3 struggled to reach altitude. She had been forced to withdraw before two wounded Americans and the remaining survivors could be picked up. Enroute to a successful emergency landing, the chopper's pilot advised that rescue attempts should be suspended because of intense ground fire and the low fuel state of the gunships.

Though they could easily have chosen to escort their sister ship to safety, Captain Young and his crew decided to stay. This was the very reason that they had volunteered to come as the backup ship.

The crew had a plan. While Captain Young maneuvered the chopper into position, his copilot would direct the supporting fire of the gunships. As soon as the Jolly touched down, the rest of the crew would rescue the wounded survivors. It would be a team effort all the way.

With the soldiers aboard, Captain Young applied full power for takeoff as enemy riflemen appeared in plain sight. They raked the chopper with small arms fire and rifle-launched grenades. Suddenly the right engine sparked and exploded as the blast flipped the HH-3 on its back and sent it down the hillside in flames.

Captain Young hung upside down in the cockpit, his clothing on fire. After struggling to kick out the side window and release the seat belt, he fell free and tumbled 100 yards to the bottom of the ravine. Frantically he beat out the flames but not before suffering second and third degree burns over one-fourth of his body.

One man who had been thrown clear lay unconscious nearby, his foot afire. Young crawled to his side and smothered the flame and dragged the man into the bushes.

Meanwhile the rescue effort continued. Two A-1E fighters arrived in the area at 3:30 a.m. The prop driven aircraft could not make radio contact with the survivors. The A-1s circled above the burning helicopters and

(Continued on the following page)



Recommended Reading: The Two O'Clock War

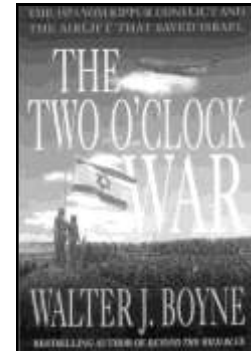
Yom Kippur, the holiest day of the Jewish calendar. A blinding shower of high explosives rains down on a collection of concrete bunkers and observation posts sunk in the Sinai sand. Minutes later, six hundred Egyptian tanks roll onto pontoon bridges to cross the Suez Canal while one hundred Syrian MIGs and Sukhoi bombers scream across the skies above the Golan Heights. The Arab forces have caught Israel completely by surprise and have her burning at both ends.

The next two weeks will determine the future of the Middle East and in the process bring the U.S. and the Soviet Union to the threshold of nuclear war.

Walter J. Boyne's *The Two O'Clock War* is a fast-paced, minute-by-minute account of that fateful October of 1973 when Israel was almost lost, a monumental American airlift saved her and two superpowers stared down the barrel of the nuclear gun.

This book is available from the museum's gift shop and can be purchased for \$30.00 including shipping and handling, payable by check, VISA or MasterCard.

Please call (302) 677-5992 or e-mail: william.hardie@dover.af.mil to place your order.



The Hall of Heroes (Cont.)

planned a "first light" rescue effort to begin at dawn.

As the sky lightened, the A-1s began to roll slowly over the helicopter graveyard. They were elated to see Captain Young emerge from hiding and shoot a signal flare. Young had been trying to warn them that the North Vietnamese would probably use him as bait for their flak trap but still there was no radio contact. Sensing a trap, the lead A-1 made several low passes but the enemy did not respond. Had they pulled out before dawn? There was no way to be sure. At 7 a.m. the A-1s were replaced by another pair of A-1Es as they returned to base for refueling.

For two hours there had been no opposition and the A-1 pilots had located five survivors near one of the wrecked helicopters. They escorted Army and South Vietnamese Air Force helicopters in for the pickup.

Circling back to the downed HH-3, the A-1s again located Captain Young and the unconscious survivor. They also spotted North Vietnamese troops moving back into the area. Fearing a repetition of the same scenario, the rescue forces could not risk bringing a nearby Jolly down for a rescue attempt.

The A-1s duelled with the enemy, inflicting heavy losses. The lead A-1 laid down a smokescreen between the enemy and the survivors and led the rescue choppers in for the pickup. Flanking the smokescreen, the North Vietnamese again opened fire. This time they scored, ripping the lead A-1 with armor-piercing shells and forcing him to depart for a safe area. The wingman laid down another smokescreen to shield Young and protect the rescue helicopters.

In the jungle below, Captain Young hid the wounded man. He would help the only way he could, by leading the enemy away from the crash site to take the pressure off the rescue force. In the meantime, the rescue helicopters were finally able to land a rescue party at the crash site. The one survivor was rescued and the bodies of the crewmembers were recovered.

Seventeen hours after the crash and six miles from the crash site, Captain Young finally escaped his pursuers. Only then was he able to signal a friendly helicopter. The ordeal was over.

Through his extraordinary heroism, aggressiveness and concern for his fellowman, Captain Young received the Congressional Medal of Honor from President Lyndon Johnson on 14 May 1968.

Source: *USAF Southeast Asia Monograph Series, Vol. VII, Mono. 9.*

“Name the Plane”

The aircraft that I asked you to identify in January’s issue of the Hangar Digest is the Sikorsky S-65 helicopter.

The Sikorsky S-65 was one of the rotary-wing marvels of the Vietnam era. The largest helicopter built outside the USSR, its dynamic parts (rotor, gearboxes and control system) were developed from those of the earlier S-64 Skycrane and made extensive use of titanium. Fitted with folding rotor blades for shipboard storage and given the designation CH-53 Sea Stallion by the U.S. Marines, the S-65 emerged as the world’s most capable assault transport.



The Marines had been strong believers in the value of the helicopter since Korea and during the Vietnam War. From their earliest battles in 1965, they counted on the box-shaped, heavy-lift S-65 to haul ammunition, troops and supplies from logistics bases right out to the battle area. To the Marines, who use air power as an adjunct to ground forces, the S-65 provided a new standard of speed and mobility in battle.

The CH-53A was the only version of the S-65 for some time after the first flight on October 11, 1964. In time, however, others saw the value of this powerful aircraft. Navy MH- and RH-53s were used to sweep mines at sea. The Air Force’s HH-53B “Super Jolly” is a dedicated combat rescue helicopter. Other important operators include Germany, Austria and the Israeli Air Force with the CH-53D.

Other variants include the: MH-53J “Pave Low III”, HH-53H “Pave Low II”, HH-53C, MH-53E “Sea Dragon”, CH-53E “Super Stallion”, RH-53D and the CH-53C.

I know this was a tough one and I did accept all submissions that included any of the mission, design and series of the helicopter listed above. Our randomly selected winner of “Name the Plane” contest is MSgt David Caisse of Scott AFB, Illinois and he will receive the book “The Two O’Clock War”. Congratulations!

This time I ask you to identify the airplane depicted below to include the manufacturer, mission, design and series (if applicable); i.e., Boeing B-17G. Please send your entry either by letter, e-mail, fax or post card to any of the addresses listed on the last page. **Please do not leave your entry by phone.** I will designate each correct response with a number ID from which I will randomly select one winner. Please send your entry as soon as possible and please include a return address. The winner will receive a book selection from the museum’s gift shop. Good luck and thank you for your participation!

(Museum staff and volunteers are not eligible)



Artifact Facts by: Shawn Colleran

The Rescue Penetrator is used for both air to land and air to water rescues. It gives the helicopters a way to extract personnel in areas that are not suitable for landing. The penetrator weighs approximately 10 pounds and is painted a bright yellow for high visibility. It stands 11½ inches high and is 26 inches in diameter at its widest part. It has three seats each of which are 4¾ inches wide. During aquatic rescue the penetrator is lowered with a floatation device and a safety strap. Since the penetrator is hollow and made of lightweight aluminum, the top of it will float approximately six inches above the surface of the water.

The optional floatation collar allows floatation of the complete assembly, not only the top six inches. The collar is also intended to assist the rescue swimmer in performing rescue operations in the water. When rescuing on land the floatation device is not needed by the rescue team. Weighted slugs can be added for land rescue so the penetrator can get through the forest foliage. Another feature are its retractable seats. They are spring loaded to further assist the apparatus in getting through the thick jungle canopy. Since the penetrator uses aircraft grade aluminum it is completely maintenance free.



Shawn Colleran is a museum intern and assists Deborah Sellars in collections.

Museum Aircraft of the Quarter: Kaman HH-43B “Huskie”

The “Huskie” was used primarily for crash rescue and aircraft fire fighting. It was already in use by the U.S. Navy when delivery of the H-43A, to the USAF Tactical Air Command, began in 1958. Delivery of the “B” series began in June 1959.

In mid 1962, the USAF changed the H-43 designation to HH-43 to reflect the aircraft’s rescue role. The final USAF version was the HH-43F with engine modifications for improved performance. Some “Fs” were used in Southeast Asia as “aerial fire trucks” and for rescuing downed airmen in North and South Vietnam. Huskies were also flown by other nations including Iran, Colombia and Morocco.

A Huskie on rescue alert could be airborne in approximately one minute. It carried two rescue men/firefighters and a fire suppression kit hanging beneath it. It often reached crashed airplanes before ground vehicles arrived. Foam from the kit plus the powerful downwash from the rotors were used to open a pathway to trapped crash victims to permit their rescue.

The museum’s HH-43B, S/N 62-4532, was first assigned to the 58th Air Rescue Squadron (ARS), Military Air Transport Service, stationed at Wheelus Air Base in Libya on 2 October 1964. It was retired at Hill AFB, Utah on 1 April 1973 and acquired by the AMC Museum in September 1998.



The photo was taken at Wheelus while our aircraft was assigned to the 58th ARS.

In March 1946, the Air Rescue Service (ARS) was established under the Air Transport Command to provide rescue coverage for the continental United States; however, by 1949 ARS aircraft covered the world’s transport routes. The emblem depicted on the cover page represents a ray of hope for those in need. The angel symbolizes protection and rescue from danger, while the angel’s robe signifies the valor with which ARS carries out its humanitarian mission.



Around the Bases: Lajes Field, Azores

Lajes Field, on the Island of Terceira in the Azores, is located 900 miles from the coast of Portugal and 2,000 miles from the United States and is the home of the **729th Air Mobility Squadron (Air Mobility Command)**.

Since their discovery in the early 15th century, the Portuguese Azores have played an important part in oceanic navigation. The Azores were a logistical point for the discovery of new worlds, a port of call for ships engaged in trade between Europe, America and India and a place to lay anchor for the galleons bringing the wealth of the Americas back to the old world. They became a bastion of Portuguese power protecting lines of communications to its newly discovered lands. The Azores became known as the gem in the Atlantic for ocean travelers. The advent of air flight did not diminish the role of these islands in the twentieth century. Lajes Field became the air connection between the old and new worlds—a crossroad in the Atlantic.

Just as the Azores proved to be an excellent stopover for shipping through the Atlantic, they proved once again to be a gem in the Atlantic during the early days of aviation. As aircraft technology improved and the accomplishments of military aviators in World War I proved successful, it was not long before aviators began to look across the great oceans as an obtainable goal. In May 1919, the first successful transatlantic flight took place from the United States to the United Kingdom by three U.S. Navy “Curtis Flyer” flying boats. They used the Horta harbor on the Azorean Island of Faial as a stopover on their flight.

It is believed that the first interest in the Azores as a mid-Atlantic landing strip came about because of an accident involving a Polish airplane attempting to cross the Atlantic in 1928. The aircraft crashed on Graciosa Island killing one of the two pilots. In that same year the Portuguese government weighed the feasibility of constructing an airfield on one of the islands of the Azores. A tableland zone between the town of Angra Do Heroismo and Lajes, on the Island of Terceira, was selected for the airstrip.

Soon a small landing strip of packed earth was created and on October 30, 1930 an AVRO single engine biplane was the first to depart from the airfield. Within a few years after its completion, the airfield was condemned due to its inadequate dimensions and the adverse weather conditions. However, the need for an airfield did not diminish and a different site was chosen on Terceira in 1934. This site was the plain land of Lajes, the present location of Lajes Field.

As German forces made advances against the rest of Europe in 1939, many European countries were lining up for and against this act of aggression. The Portuguese government saw neutrality as its best line of defense against Germany. However in 1941, Portuguese officials recognizing the dangers if the Azores were to get into German hands, expanded the runway and sent additional troops and equipment to Lajes including Gloster Gladiator aircraft. The base was declared capable of air defense in July 1941. The military activities in the Azores grew in 1942 as the Gladiators evolved into flying cover missions for allied convoys, reconnaissance missions and meteorological flights.

Early in the war, the Allied Powers of Britain and the United States recognized the potential of operating out of the Azores. With German U-boats reeking havoc on transatlantic shipping, Britain saw the need to conduct operations out of the Azores. As the U.S. became increasingly involved in the war, it was looking for the fastest means to get men and material to North Africa and Europe. The Azores offered that opportunity. However, the Portuguese government remained neutral.

Under an agreement signed in August 1943, the Portuguese gave Britain the use of the ports of Horta, on the Island of Faial, Ponta Delgada on the island of Sao Miguel and the airfields of Lagens on Terceira and Santana Field on Sao Miguel Island.

(Continued on the following page)



Around the Bases: Lajes Field, Azores (Cont.)

The name Lagens Field was the original British designation for Lajes Field. The U.S. used that name until 1950 when it became Lages Field. It was not until 1953 when the name Lajes Field became the official designation. For simplicity, Lajes will be the named used throughout this history.

In October 1943 the British built hangars, developed a large power plant and set up living quarters. They brought 60,000 U.S. supplied Marston mats (perforated steel plates 10 feet long and 15 inches wide, pierced by 87 holes per plate) to Lajes. When these mats were linked together, an all weather, heavy-aircraft surface 150 feet wide and 5,000 feet long was created. Just two weeks after their arrival, British bombers (Hudsons, Lancasters, B-17 Flying Fortresses, Yorks and Wellingtons) began to operate against German U-boats around a 500-mile radius of the Azores.

The first U-boat "kill" came when a B-17 attacked an exposed submarine just one month after the British forces arrived at Lajes Field. The contributions of the Azores and the British anti-submarine squadrons were one of the turning points in the Battle of the Atlantic in 1943.

The United States, recognizing the importance of the Azores as a staging post for bombers and transports to Europe and with Portuguese permission, assigned a handful of U.S. military advisors to give technical aid to the British. On 1 December 1943, British and U.S. military representatives signed a joint agreement outlining roles and responsibilities for the U.S. military presence at Lajes. The plan set forth guidelines for U.S. ferried and transport aircraft to make a limited number of landings at Lajes. In return, the U.S. agreed to assist the British in improving and extending the facilities at Lajes and on 9 December 1943, the first U.S. bomber, a B-17, was ferried through Lajes. It has often times been stated that the U.S. came into the Azores "through the back door."

The first American unit, a Naval Construction Battalion arrived at Angra Harbor on 9 January 1944 aboard the SS Abraham Lincoln. This unit was largely responsible for the development of the harbor basin, the unloading of vessels, the laying down of the gasoline pipeline and the construction of two taxiways adjacent to the runway.

Eight days later, a U.S. Army engineering battalion arrived aboard the SS John Clark with 800 men, machinery and building materials to "build an air base". In addition to construction of facilities, roads, a fuel tank farm, supplying water and power generation, the Army engineers constructed three paved runways in the form of an "A". One of these was over 10,000 feet long, the longest in the world at the time.

The first regularly scheduled cargo plane under Air Transport Command (ATC) control to use Lajes carried pontoons together with other cargo for the Mediterranean Theater. ATC traffic through Lajes increased from approximately 90 airplanes in January 1944 to more than 600 airplanes in June 1944. By the end of June 1944 more than 1,900 American aircraft had passed through the Azorean airbase.

By using Lajes Field it was possible to reduce flying time between the United States and North Africa from 70 to 40 hours. This considerable reduction in flying hours enabled aircraft to make almost twice as many crossings per month and demonstrated the geographic value of the Azores during World War II and throughout Lajes' history.

From November 1943 to the end of the war in Europe, almost 9,000 aircraft departed from Lajes for destinations in North Africa, the United Kingdom and after the allies gained a foothold on mainland Europe, to Orly Field near Paris.

In June 1946, The U.S. and the U.K. transferred the control of Lajes to Portugal. The preliminary agreement between the U.S. and Portugal was terminated. However, talks between the two governments began about extending the American stay in the Azores. It had become clear the U.S. flights across the Atlantic could not be abruptly halted. Then on 10 September 1946, a temporary agreement was reached giving the U.S.

(Continued on the following page)

Around the Bases: Lajes Field, Azores (Cont.)

military rights to the field for an additional 18 months. In turn, the U.S. was required to maintain services and support operations at the base “in collaboration with and under the superintendence of the Portuguese authorities.”

With the end of World War II, Germany was occupied by the four victorious allied powers. The City of Berlin was also divided and was located 110 miles within the Soviet occupied territory. Trying to force the Western Powers out of the city, the Soviet Union cut the land routes between West Germany and Berlin. On 26 June 1948, the U.S. and Britain began airlifting supplies to the city. The operation lasted until 30 September 1949 when the land routes were reopened.

Although the Berlin Airlift is thought of as strictly a U.S. Forces in Europe operation, it was also a significant event for Lajes Field. Throughout the airlift, C-47, DC-4 and C-54 aircraft transited Lajes en route to Germany. Lajes played one of the many supporting roles that led to the success of the Berlin Airlift with more than 3,000 aircraft passing through the base during the airlift. It was then that the U.S. realized that Lajes was an important strategic link to counter Soviet aggression during the Cold War and negotiations with Portugal, for long-term rights began.

Expiration of the 1946 agreement was December 1949. During the negotiations, U.S. rights to facilities at Lajes were extended for two more years. Finally after two years, on 6 September 1951, the Portuguese government announced in Lisbon a new treaty with the United States. This treaty has been the foundation of all Lajes Field agreements since then.

The 1950s were a time when the world was faced with a communist threat and the Cold War was in its infancy. To meet the needs of this growing threat, the U.S. Air Force positioned aircraft in Western Europe as a deterrent. Small airfields in Europe became large bases and the flow of aircraft, personnel and material was continuous across the Atlantic. The importance of Lajes as a mid-Atlantic refueling station proved invaluable. This was a great time of expansion for Lajes Field. The mission, personnel and the base were growing and as Lajes entered the decade of the 1950s the Air Force felt the establishment of a wing would be the best organization to keep pace with the growth. Then on 11 August 1952, Headquarters Atlantic Division of the Military Air Transport Service requested that Lajes be elevated to wing status. Permission was granted and on 1 February 1953 the 1605th Air Base Wing was established.

This was not the only change to the U.S. military leadership in the Azores. On 16 March 1953, the U.S. Atlantic Command organized a subordinate unified command in the Azores called U.S. Forces Azores (USFORAZ) and assigned the commander of the 1605th Air Bases Wing as the commander over all the U.S. Forces in the Azores. A small staff of Navy, Army and Air Force personnel comprised the joint staff of USFORAZ. As the local U.S. Ambassador to Portugal, the Commander USFORAZ was and still is today the liaison between the U.S. and the Portuguese in the Azores. The command mission was established to support allied forces in the area, to assist in local defense and to protect and evacuate U.S. citizens from the Azores, Europe, Africa and Southwest Asia and other areas of the world.

In February 1952, a precedent was established with the arrival of six Strategic Air Command (SAC) B-36 aircraft en route to a training mission in Europe. While it wasn't the first time SAC aircraft transited Lajes, it was certainly the largest seen at that time. It prompted a re-study of Lajes' ability to support SAC units. It led to the establishment of a SAC liaison operations office at Lajes that coordinated SAC aircraft movements with the Lajes base command. Beginning in January 1958, a rotational SAC provisional tanker force was established at Lajes flying the KC-97 tanker aircraft. The primary purpose of this assignment was to provide en route refueling support to SAC aircraft transiting the Atlantic Ocean. However, as SAC's inter-continental ballistic missile program grew during the 1960s, its reliance on overseas bases diminished. Also longer range bomber and tanker aircraft lessened the need for deployed tanker units. Subsequently, the SAC units left Lajes in 1964.

With the termination of SAC's rotational units coupled with newer aircraft such as the C-135, C-130 and the C-141 with over flight capabilities, the traffic through Lajes suffered a gradual decline. This led to a
(Continued on the following page)

Around the Bases: Lajes Field, Azores (Cont.)

new mission for Lajes Field. In 1966, the commander of the Military Airlift Command was concerned with the appearance of MAC aircraft and established a maintenance depot at Lajes to restore C-118s from Rhein Main Air Base, Germany that were used for medical air evacuations. Five C-118s were completely refurbished from nose to tail to like new condition. Also, fifteen C-135s from McGuire AFB were refurbished by the maintenance facility at Lajes.

Lajes, however, couldn't escape the decline in mission aircraft transiting the airfield. In 1967, a rotational Lockheed P-3 Orion mission was established by the Naval Air Facility.

The sortie rates generated by the Navy were exceeding those of the Air Force during the late 1960s and early 1970s. The Department of Defense made plans to transfer U.S. military command at Lajes to the Navy in 1974. But before the change occurred, a significant world event would have another profound impact on the status of Lajes Field, the Arab-Israel Conflict of 1973.

On 6 October 1973, the countries of Egypt and Syria launched an attack on Israel. On 12 October, the Military Airlift Command received orders to move supplies and ammunition to Israel. U.S. allies in Europe, fearful of losing oil supplies from the Arab oil producing nations, denied the U.S. the use of their air bases for the operation. Only Portugal agreed to cooperate fully with the airlift giving the U.S. landing rights at Lajes Field. Within two days of receiving the orders, the first flight unloaded in Israel. During the initial 48 hours of Operation NICKEL GRASS, an unprecedented 136 landings and 88 departures were directed, managed and supported by Lajes. There were 312 C-5 and 845 C-141 aircraft missions transiting through Lajes during the operation.

This airlift had a two-fold affect on the U.S. Air Force. First, the Air Force modified the C-141 fleet for mid-air refueling and renewed interest in the C-5 aerial refueling capability. The second confirmed the importance of maintaining basing facilities at Lajes. In January 1974, the Department of Defense reconsidered the U.S. Navy command of the field and retained the Air Force and the 1605th ABW as hosts. The 1605th earned the Air Force Outstanding Unit Award for its efforts during Operation NICKEL GRASS.

As Lajes entered the 1980s, a change in the organizational structure of the wing took place. On 1 January 1982, the 1605th Air Base Wing was redesignated the 1605th Military Airlift Support Wing. This move would take Lajes away from being an en route aircraft maintenance facility to en route support facility. However, station air traffic continued along at a steady rate. Transiting aircraft in exercises such as Bright Star and the annual REFORGER (Return of Forces to Germany) were still making their way through Lajes.

In the summer of 1984, Lajes undertook a new mission. The operation, known as the Silk Purse Control Group and flying EC-135s, functioned as an airborne command post for the U.S. Commander-in-Chief of Europe. The Silk Purse mission was highly classified and little was known of its activities at Lajes but its mission was deterring aggression from the Soviet Union. After the collapse of the Soviet Union, the Silk Purse mission terminated in late August of 1991.

The 1990s brought about the end of the Soviet Union and the Cold War and with it many challenges to the United States and its military. With global balance in disorder, many nations were free to choose their own course of action. For some nations this course led to disputes between neighbors and its own citizens. The U.S. military was faced with reducing its force and infrastructure while at the same time answering the world's call for help.

The first test of the 1990s was when Iraq invaded Kuwait in August 1990. Immediately the world took

(Continued on the following page)



C-133 at Lajes c1960

Around the Bases: Lajes Field, Azores (Cont.)

action and began positioning forces in Southwest Asia starting what became known as Operation DESERT SHIELD and further opening the campaign that would be Operation DESERT STORM. Lajes supported the massive airlift and throughout the campaign handled over 15,000 tons of essential cargo and handling over 75,000 transient personnel while billeting more than 10,000 during both operations. The challenges were met head-on with determination and pride that far exceeded expectations. The 1605th received the Air Force Outstanding Unit Award for its support of the Gulf War.

Soon after the Gulf War ended, the Air Force underwent a massive reorganization. The strategic and tactical assets of the Strategic Air Command and the Tactical Air Command were combined to form the Air Combat Command (ACC). MAC's airlift operations and SAC's refueling capabilities were shaped into the Air Mobility Command (AMC). The Lajes base command changed from the 1605th Military Airlift Support Wing to the 65th Support Wing in January 1992. The wing remained under the Air Mobility Command until October 1993 when the transition from AMC to ACC took place. The wing under ACC formed a more natural chain of command. The commander of U.S. Forces Azores reports to U.S. Atlantic Command of which ACC is a component. Along with the change in command, the 65th Support Wing was redesignated the 65th Air Base Wing. The Air Mobility Command maintains the **729th Air Mobility Squadron** to coordinate AMC flights through Lajes and it is the largest tenant unit on base.

The Air Mobility Command awarded the 729th Air Mobility Squadron with its Small Terminal Unit of the Year honor for 2003. The terminal processed more than 43,000 passengers and 4,400 tons of cargo on nearly 3,000 missions. The unit also helped move 553 tons of cargo and 1,462 passengers during Operation Enduring Freedom. The squadron competed against six others across the globe to receive the award. When receiving the award, the 729th AMS commander said: "there were many other deeds accomplished to make the unit a winner and now the fruits of our labor are visible."

Source: <http://www.lajes.af.mil>; AMC News Service

Boys Will Be Boys: Elisio and Erland

Two friends Elisio and Erland live on the Portuguese island of Tericeria in the Azores. Elisio's mother is a maid and is employed by a major, who is a doctor of some sort, who lives on Lajes Air Base. Elisio's father is unemployed and Erland's father buys and sells horses and his mother is unemployed.

Elisio has been planning for sometime to go to Canada, the home of his sister Maria. He doesn't know her address but he thinks he could find her if he walked around Toronto long enough.

Having but a few escudos between them, certainly not enough for airplane fare, the two boys boarded a C-124 about midnight. They watched the aircraft for about an hour before as it was being refueled, fletted, etc. When the lights inside the aircraft were turned off and the people left, they sneaked on. They entered a compartment below the cargo deck. Apparently there was baggage or cargo near the entrance way and they had to get on their hands and knees to enter the compartment.

They were quite cold during the flight that they said took about 13 hours. They ate food, which they found on the forward area of the main cargo deck. They think it may have been frozen chicken. At the time no one was on the cargo deck. However, at one time they peeked out of their hiding place and saw two people sleeping, one on each side of the airplane.

After landing at Dover they heard people working in the airplane. When the noises ceased Erland came out of his hiding place and walked around a little bit and was seen by the ground crew and was escorted to the office near the loading dock. Before reaching the office Erland directed the ground crew back to the aircraft and showed them where Elisio was still hiding. The Air Police were then notified.

Elisio said that he won't get caught the next time and he would not have been caught this time if Erland had stayed hidden as it was his plan to leave the airplane and the base after it became dark.

Source: *Condensed from an official Dover Air Force Base Report: "Portuguese National Stowaways" dated, January 2, 1961.*

★The Benefits of Membership★

Becoming a Member of the Museum is easy and it not only benefits the Museum's programs and projects, it also benefits you!

For an updated membership form,
please visit:

<http://amcmuseum.org/support>

AMC Museum Foundation, Inc.
P.O. Box 02050
Dover AFB, DE 19902-2050

Nonprofit Org
U.S. Postage
PAID
Dover, DE 19901
Permit No. 17



**AMC Museum Foundation
Board of Directors:**

President

Brig Gen Michael Quarnaccio,
USAFR (Ret)

Vice President

TSgt Jay Schmukler, USAF (Ret)

Secretary

Lt Col Phil White, USAF (Ret)

Treasurer

MSgt Harry Van Den Heuvel, USAF
(Ret)

Members

Brig Gen Richard Bundy, USAF (Ret);
Mrs. Mary Frey-Foss; Mr. Leroy
Kline; Ms. Mary Skelton; SMSgt
Byron "Hank" Baker, USAF (Ret);
Col Robert Welsh, USAFR (Ret); Lt
Col Gerald Foss, USAF (Ret); CMSgt
Jimmy Nolan, USAF (Ret); Maj Hans
Reigle, USAFR (Ret); Maj William
Voigt, USAF (Ret); Mr. Dick Caldwell

Staff:

Director

Mike Leister

Curator

Jim Leech

Information Manager

John Taylor

Chief of Restoration

MSgt Rich Breckenridge, USAF

Collection Manager

Deborah Sellars

Archivist/Editor Hangar Digest

Lt Col Harry E. Heist, USAF (Ret)

Museum Store Manager

Col Charles W. "Bill" Hardie, USAF (Ret)

Educator

Dick Caldwell

Volunteer Coordinator

Janice Caldwell

Librarian

MSgt Bob Wikso, USAF (Ret)

Maintenance Liaison

CMSgt Brian Wasko, USAFR

Website (www.amcmuseum.org)

Bethany Hacker

Senior Volunteer

MSgt Al Shank, USAF (Ret)

The Hangar Digest is published quarterly and is dedicated to the preservation of our airlift and tanker heritage. All articles, unless otherwise noted, are written by the editor. All photographs are the courtesy of the Air Mobility Command Museum unless otherwise designated.

I solicit your comments, articles and ideas for future issues. You may contact me by mail: Harry E. Heist c/o The Hangar Digest, P.O. Box 02050, Dover AFB, DE 19902-2050; FAX (302)677-5940; PH (302)677-5997 and email:

harry.heist@dover.af.mil
Harry E. Heist (Editor)