
Airplane Crash in Guam, August 6, 1997: The Aeromedical Evacuation Response

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A civilian airplane crash on the island of Guam in 1997 produced 16 burned survivors. The U.S. Army Burn Flight Team and U.S. Air Force Critical Care Air Transport Teams conducted a joint aeromedical mission in response to this disaster. This experience was reviewed from the Burn Flight Team perspective. A record of events was made during the mission, and an after-action review was conducted after the mission. Twelve patients were transported to Korea, and four critically ill patients were transported to the U.S. Army Burn Center in San Antonio, TX. The latter mission required 21 hours of in-flight critical care and was completed 4 days and 3 hours after the crash. After-action review resulted in changes in communications procedures, administrative oversight, supplies and equipment, composition of the Burn Flight Team, and readiness and training. These peacetime lessons contributed to the military's ability to transport wartime burn casualties in ensuing years and indicate the close interdependence of the disaster response and combat missions. (J Burn Care Res 2006;27:642-648)

On August 6, 1997 at 1:42 am local time, Korean Air flight 801, a Boeing 747 en route from Seoul, Korea, to Guam International Airport, crashed short of the runway on high ground at Nimitz Hill, Guam. On board were 17 pilots and crew members and 237 passengers. Of these, 228 were killed, and 26 survived the accident with serious injuries. The purpose of this article is to describe the response of the U.S. Army Burn Flight Team and U.S. Air Force (USAF) Critical Air Transport Teams (CCATTs) to the accident, following a request for assistance from the U.S. Naval Hospital at Guam (NHG). This article is based on notes taken the author during the mission to Guam, and on an after-action review conducted soon after the mission was completed. The Guam accident provided the Army and Air Force teams with several unique challenges. The lessons learned from this event contributed to the methods later used to con-

duct long-range aeromedical evacuation of critically ill burn patients, for example during war in Iraq.¹

BACKGROUND

Guam, a 541-km² tropical island in the North Pacific Ocean, has been a U.S. territory since it was ceded by Spain in 1898 during the Spanish-American War. It is considered strategically important to the United States and has a large U.S. military presence.² Guam is located approximately 1200 miles east of the Philippines and 3500 miles west of Hawaii. Tourism is the leading industry on the island.³

The Burn Flight Team was established in 1951 at the U.S. Army Institute of Surgical Research (ISR, the U.S. Army Burn Center), Fort Sam Houston, Texas. Since then, it has conducted long-range aeromedical evacuation of critically ill burn patients from locations around the world to the Burn Center and has responded to a variety of fire disasters and military conflicts.⁴ Three years before the Guam crash, for example, the Burn Flight Team transported 20 burn patients after an airplane crash at Pope Air Force Base, North Carolina.^{5,6} One Burn Flight Team typically consists of a general surgeon with burn fellowship training, a critical care registered nurse, a licensed vocational nurse, and a respiratory therapist. Team membership requires significant previous experience in burn care and full-time employment in the intensive care unit (ICU) at the Army Burn Center.

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The opinions or assertions contained herein are the private views of the author, and are not to be construed as official or as the views of the Department of the Army or Department of Defense.

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CCATTs were created after U.S. involvement in Somalia (1992–1994) and were built on the precedent set by the Burn Flight Team of critical care in the air. They have been widely used for aeromedical transport of critically ill patients by the U.S. military since then.^{7,8} They do not have the burn-specific expertise provided by the ISR. Thus, a combination of ISR and USAF assets was a logical choice for this long-range, multiple-day, multiple-casualty mission.

According to the final report by the U.S. National Transportation Safety Board (NTSB), the probable cause of the crash on August 6, 1997 “was the captain’s failure to adequately brief and execute the non-precision approach . . . Contributing to these failures were the captain’s fatigue and Korean Air’s inadequate flight crew training . . . the Federal Aviation Administration’s (FAA) intentional inhibition of the minimum safe altitude warning system (MSAW) at Guam and the agency’s failure to adequately manage the system.”⁹ Upon impact, the aircraft was essentially destroyed, and the wreckage caught fire. The cause of death for those dying at the scene was noted to be blunt force trauma, thermal injury, and carbon monoxide inhalation. Emergency response to the scene has been described by the NTSB.⁹

TIMETABLE

Events Before Arrival at Guam. Approximately 5 hours after the crash (C+5h), NHG called to alert the ISR about the crash and to advise the ISR command of a possible request for assistance. For the next 2 hours, efforts by ISR personnel to call NHG surgeons by telephone failed because of overloaded circuits. By C+8:30h, the author was able to contact the Chief of Surgery at NHG, who reported 16 casualties with burns (and other trauma) who had been admitted to NHG. Four of these were intubated, and two had associated orthopedic trauma; a total of eight patients were in the ICU and 8 on the ward. NHG stated that they would request Burn Flight Team support via the NHG chain of command. At C+9h, the ISR became aware that a C141 aircraft was leaving Andrews AFB near Washington, DC, en route to Guam with members of the NTSB. However, ISR learned through the USAF that there was no space on board this aircraft for Burn Flight Team personnel and equipment. By approximately C+11h, NHG’s higher command, Commander in Chief, Pacific Command had received the request for assistance from NHG.

After the Pope Air Force Base crash of 1994,⁶ the ISR developed a packing list of supplies and equipment that could be put together in response to similar burn disasters. However, this “Mass Casualty Pallet”

had never been assembled. At C+11h Burn Flight Team leadership decided to assemble this pallet and to take it to Guam. Brooke Army Medical Center (BAMC) logistics personnel assembled the disposable supplies on the list throughout the evening, completing the task by C+17h. Administrative hurdles were identified, to include identification of personnel to man the mission, generation of a fund cite to pay for the mission, official orders, availability of aircraft, vehicles for transport on the ground in Guam, passports and immunization status for team members, and provision for meals and lodging for the personnel.

At C+12h, the request for assistance had arrived at the level of the Joint Chiefs of Staff, U.S. Department of Defense (National Military Command Center) in Washington, DC. Meanwhile, the USAF activated two CCATTs with a total of seven personnel to accompany the Burn Flight Team on this mission. At C+15h, a written instruction was received at ISR from the National Military Command Center authorizing the deployment of two Burn Flight Teams and two CCATTs to Guam; at that time, a funding cite was still pending. Formal orders were faxed by the Joint Chiefs of Staff shortly thereafter. Throughout this multiple-step process, the ISR conducted extensive coordination with the Current Operations Branch of the U.S. Army Medical Command, with ISR’s higher command at the U.S. Army Medical Research and Materiel Command, and with the USAF Global Patient Movement Requirements Center at Scott Air Force Base, Illinois.

Also during the evening, several equipment problems were identified and addressed. Clinical monitors (electrocardiography, blood pressure, and pulse oximetry), infusion pumps, and suction devices were not available in sufficient numbers in the Burn Flight Team inventory to permit critical care of a large number of casualties. Additional devices were obtained from BAMC, the ISR Burn Center, and the 41st Combat Support Hospital at Fort Sam Houston, Texas. Oxygen cylinders were filled, and monitor batteries were recharged. The final weight of the Mass Casualty Pallet (supplies and equipment) was 4500 lbs. It included 6 Kevlar oxygen cylinders and 11 TXP Military Transporter ventilators (Percussionaire, Inc., Sandpoint, ID).¹⁰ A 5-ton truck was borrowed from the 41st Combat Support Hospital to transport the Mass Casualty Pallet to the departure airfield, and a ground-movement plan was written to include the truck and 2 passenger vans.

At C+29h, the Burn Flight Team assembled at the ISR and completed a final personnel inspection. The Team departed the ISR shortly thereafter and moved to Kelly Air Force Base, arriving at C+30h along with

the USAF CCATTs. The Burn Flight Team consisted of two surgeons, two critical care registered nurses, two licensed vocational nurses, and two respiratory therapists. Thus, the members of two teams were combined into one for this mission. These personnel were augmented by one microbiologist and one laboratory technician, to provide for the possibility of an extended mission at Guam involving definitive burn care. Finally, one senior medical noncommissioned officer joined the team to provide administrative and logistical support. The CCATTs consisted of three staff physicians, one critical care fellow, four critical care registered nurses, and two respiratory therapists. The teams departed Kelly at C+32h by a USAF C141 aircraft. At Hickam Air Force Base in Hawaii, the teams received a faxed update on the status of the burn patients from the Pacific Air Force surgeon. Approximately 21 hours after leaving San Antonio, Texas, the teams arrived at Anderson Air Force Base, Guam.

Events After Arrival at Guam. Upon arrival at Guam, the teams learned that there were three intubated critically ill burn patients at NHG and one intubated patient with 80% TBSA burns at the major civilian hospital, Guam Memorial Hospital (GMH). One Burn Flight Team and the CCATTs went to NHG, and 1 Burn Flight Team to GMH. These teams conducted rounds at the two hospitals along with the staff physicians and nurses at those locations. At GMH, the ISR burn surgeon identified the need to perform escharotomies. His credentials were verified by reference to a copy of *Who's Who*, and he was then able to perform the procedure.

Because the majority of the patients were Korean citizens (except for one critically ill U.S. citizen), several destinations for the patients were considered to include transporting all of the Korean burn patients to Korea. There were extensive discussions on this matter between the Burn Flight Team leader, Korean family members (who had flown to Guam following the accident), officials of Korean Air and of the Korean government, physicians at the Korean burn unit at Inha University, and U.S. government officials. The U.S. government offered to assist the Korean government as desired. While these discussions were under way, the 12 noncritically ill burn patients were transported by USAF aircraft to Seoul. They were accompanied by one CCATT, consisting of one physician, two nurses, and one respiratory therapist. An alternate plan was developed in which one Burn Flight Team (four personnel) would take the three critically ill Korean citizens to Korea, and the other Burn Flight Team would take the critically ill U.S. citizen to Texas. Ultimately, all parties agreed to transport the

three critically ill Koreans and one critically ill U.S. citizen to Texas. Approval was obtained from the U.S. State Department for the Korean citizens to receive care at the U.S. Army Burn Center. This required that a request be routed from the Korean government, to the U.S. Department of State, to the U.S. Department of Defense. It also required identification of a source of funding for the transport and care of the foreign nationals.

The following day, one patient required a diagnostic peritoneal lavage because of worsening base deficit, and another required diuresis for pulmonary edema. The teams met to discuss the ground and air movement plans. The following variables in flight were to be monitored:

- Urine output, hourly
- EKG, respiratory rate, heart rate, blood pressure (arterial line), peripheral saturation of oxygen (pulse oximetry; Propaq 106, Protocol Systems, Inc., Beaverton, OR)
- End-tidal carbon dioxide
- Tidal volume, as needed (Wright's spirometry)
- Axillary or rectal temperature
- Intravenous infusion rates (IVAC, Alaris Medical Systems, San Diego, CA)
- Ambient temperature
- Arterial blood gases and electrolytes (IRMA, Edison, NJ)

En Route From Guam to Texas. Two patients were placed on TXP ventilators, and 2 on Uni-Vent Model 754 ventilators (Impact Instrumentation, Inc., West Caldwell, NJ). Three ambulances departed NHG, and one departed GMH at C+3d 10h. Upon arrival at Anderson Air Force Base (Figure 1), Guam, 37 ambulatory patients and attendants were occupying the C141 aircraft designated for the burn flight.



Figure 1. An Army respiratory therapist and critical care burn nurse move a patient on a TXP Military Transporter mechanical ventilator from ground ambulance to aircraft on Guam.

Table 1. Aircraft commonly used by the U.S. Army Burn Flight Team

Aircraft	Litter	Ambulatory	LOX
C9A	Nightingale	40	40* 25
C130	Hercules	74	80 0‡
C141	Starlifter	103	160 150
C17	Globemaster III	60†	200

LOX, liquid oxygen; L, 1 liter of LOX provides 804 liters of gaseous oxygen; litter, maximum number of litter patients who may be transported on this aircraft (without any ambulatory patients); ambulatory, maximum number of ambulatory (seated) patients who may be transported on this aircraft (without any litter patients, except as noted).

Adopted from U.S. Air Force Air Mobility Command Pamphlet 11-303, "Access to the Aeromedical Evacuation System" (AMCPAM11-303), 3 Nov 2000.

* Plus 4 litter patients.

† This aircraft lacks organic LOX capability. PT-LOX units, each with 10 L of LOX, may be added.

‡ Including 12 litter patients on the ramp.

The C141 is one of several large aircraft that have been used for aeromedical evacuation by the Army Burn Flight Team and by CCATTs (Table 1).

After discussion about infection control and other patient care concerns, these personnel were moved off the aircraft and placed on a subsequent flight to the United States. The 21-hour flight from Guam to Hickam Air Force Base, Hawaii, and from Hawaii to Kelly Air Force Base, San Antonio, Texas, was fairly uneventful. In essence, an Airborne ICU was established in the back of the C141 aircraft for these patients



Figure 2. In essence, the C141 cargo aircraft became an "Airborne ICU" during the 21-hour journey from Guam to Texas.



Figure 3. Flight Team and U.S. Air Force personnel off-load patients from the rear of the C141 aircraft upon arrival in Texas.

(Figure 2). One USAF critical care nurse joined the flight in Hawaii. Numerous ventilator adjustments were made in flight based on the results of blood gas analysis. A ground movement plan for Texas was developed in flight. Two buses, one ambulance, and one 5-ton truck were used to move the patients, teams, and equipment (Figure 3). The patients arrived at the Army Burn Center at C+4d 8h (Figure 4).



Figure 4. The Commanding General of Brooke Army Medical Center, BG Harold Timboe (far left), assists Army Burn Center personnel offloading survivors of the Guam crash upon arrival at the hospital.

PATIENTS

The 12 patients with less-severe injuries who were evacuated to Korea were lost to follow-up. The four patients who were evacuated to the U.S. Army Burn Center arrived in critically ill but stable condition. The severity of their injuries is manifested by the fact that all four eventually died during their hospital stay (Table 2).

AFTER-ACTION REVIEW

The following observations were captured during the After-Action Review conducted at ISR after the mission. Since then, many of these “lessons learned” have resulted in changes in practice or in materiel purchases.

Communication With Guam. ISR was unable to contact NHG by phone for more than 2 h after initial notification of their possible need for assistance. This may have delayed Burn Flight Team departure. This type of problem can be expected during remote disasters of this nature or during certain domestic disasters. Scenarios can be envisioned in which communication cannot be restored in a reasonable period of time, resulting in loss of life. Since then, ISR has assigned one noncommissioned officer the role of “rear operations” during overseas missions. This individual is responsible, for instance, for facilitating communication with the referring hospital while the Team gets ready to deploy. As back-up devices, the Team also purchased satellite (INMARSAT-M) and cellular telephones and two-way radios.

Administration. Despite excellent support throughout the chain of command, a time-consuming process was required to gain approval for launching the Burn Flight Team overseas for this type of mission. Since the beginning of the current conflict in Iraq, authority to launch the Team has been delegated down to the level

of the Commander, U.S. Army Institute of Surgical Research.

Much of the mission leader’s time in Guam was occupied by arranging for Korean and U.S. official approval of transport of the three Korean citizens to the ISR. The referring hospital was not aware of these requirements, namely a written request by the foreign government for assistance, and a method of payment. It appeared that the Korean authorities were likewise unaware. Negotiating these arrangements is one of the challenging aspects of this type of mission, and may introduce significant time delays. Thus, an effort should be made to inform the referring hospital and the U.S. and foreign governments of the procedures while the Burn Flight Team is en route.

Supplies and Equipment. For this mission, the ISR put together a Mass Casualty Pallet of burn care supplies based on previous experience with the Pope Air Force Base disaster, and transported it to Guam.⁶ Gathering these supplies took approximately 6 hours. The pallet was not needed in Guam but might have been, since Guam ran out of lactated Ringer’s solution during the resuscitation. Thereafter, the components of this pallet were stored in chests in the ISR warehouse, and periodic inspection and replacement were performed.

With respect to equipment, the Burn Flight Team possessed the items needed to accomplish long-distance transport of a small number of casualties, but it had to obtain additional items from BAMC, the 41st Combat Support Hospital, and the USAF CCATT to support the potential workload. This process was time consuming, and the need to upgrade equipment was recognized. With the designation of the Burn Flight Teams as Special Medical Augmentation Response Teams for Burns by the U.S. Army Surgeon General in

Table 2. Patients transported to the U.S. Army Burn Center from Guam

Patient	Age	TBSA	Full	LOS	Cause of Death
1	11	43	33	1	Postoperative (excision and grafting) respiratory failure
2	28	50	48	62	Nonocclusive mesenteric ischemia and small bowel infarction; invasive fungal peritonitis and burn wound infection
3	30	79	79	21	Nonocclusive mesenteric ischemia; multiple system organ failure
4	40	80	73	72	Gram-negative invasive burn wound infection; Candida burn wound infection; multiple system organ failure

Age, age in years; *TBSA*, total body surface area burned, percent; *Full*, full thickness burn size, percent; *LOS*, Burn Center length of stay, in days.

1998,¹¹ the equipment needed to provide airborne intensive care for up to 16 critically ill, intubated burn patients was purchased and maintained in the ISR warehouse.⁴

The USAF crew transporting the Burn Flight Team from Guam to Hawaii requested detailed information on each piece of equipment carried to ensure that all of it had been approved for in-flight use. Satisfying this request was time-consuming. Since then, the Burn Flight Team carried a packet with documentation for all the approved equipment.

Personnel. One surgeon encountered a delay in providing direct patient care at GMH because he did not have credentials there. This problem was solved when GMH consulted *Who's Who*. In anticipation of this, the Burn Flight Team has taken copies of surgeons' credentials on subsequent deployments.

Before overseas deployment, military personnel require immunizations, passports, wills, powers of attorney, and issue of personal equipment and meals. In general, these items are now handled by participation by all Burn Flight Team personnel in periodic Soldier Readiness Processing to ensure deployment readiness. Individual military equipment such as sleeping bags and rucksacks was issued to each Team member, and kept in the ISR warehouse. Meals Ready to Eat likewise were stocked.

The CCATT contributed both their manpower and equipment to a successful mission. This was the first "joint" ISR-CCATT mission. Subsequently, the Burn Flight Team and CCATT have divided the substantial workload of moving burn patients from Landstuhl, Germany to the U.S. Army Burn Center. The Burn Flight Team has been used to transport the most critically ill patients. CCATT has been used to move those intermediate in acuity, and the routine USAF aeromedical evacuation process has been used to move those who are not critically ill. Furthermore, the Burn Flight Team has emphasized CCATT training for the great majority of its members. Thus, the Guam mission was the beginning of a productive partnership between the 2 programs.

A senior noncommissioned officer (Sergeant First Class) was added to the Burn Flight Team for this mission. He contributed immensely to the success of the mission, particularly in the areas of supply, transportation, and troop leadership. Expertise in Hazardous Materials and USAF Loadmaster (how to load the aircraft safely) issues was essential. Since then, a senior sergeant has been added to the Burn Flight Team for all overseas missions. This has been crucial to the mission in support of casualties from the current conflict in Iraq.

Training. The mission went smoothly despite the points noted. In the years after the mission to Guam, the number of real-world aeromedical evacuation missions conducted by the Burn Flight Team decreased. In this setting, it became important to conduct training exercises in order to preserve the Team's ability to deploy. Some of the exercises conducted before the outbreak of hostilities in Iraq were as follows:

- March 2000: C17 Airborne ICU training.
- May 2000: Consequence Management 2000 exercise with National Disaster Medical System (NDMS), Fort Gordon, GA.
- June 2000: Texas National Guard training, Hunt, TX.
- September 2000: Emergency deployment exercise and field ICU, Camp Bullis, TX.
- September 2000: Emergency deployment exercise and field ICU, Florida Ranger Camp, Eglin Air Force Base, TX.
- October 2000: C12 Airborne ICU training.
- January 2001: WMD III exercise, Bay Pines, FL.
- May 2001: Consequence Island 2001 exercise in Puerto Rico with NDMS.
- September 2001: Training flight, UH60 helicopter, 249th Aviation, Camp Bullis, TX.
- July 2002: Field Training Exercise with the 228th Combat Support Hospital. Established 8-bed field burn ICU.
- September 2002: Consequence Management 2002, Fort Gordon, GA.
- October 2002: Emergency deployment exercise. Training at the Brooks Air Force Base C141 simulator.

Patient Care. Despite the excellent care provided by the referring hospitals, en route, and after arrival at the Burn Center, all four critically ill patients eventually died (Table 1). Whether even more rapid deployment and evacuation could have made a difference is a matter of conjecture. Certainly, unprecedented rapidity of evacuation and timeliness of burn wound excision at the Burn Center have characterized care of the casualties from war in Iraq.

CONCLUSION

The mission to Guam in 1997 provided the Army Burn Flight Team with the impetus for changes in training, materiel, and operations. It is hoped that these changes helped to pave the way for the Team's current ability to conduct the long-range aeromedical evacuation of casualties from the war in Iraq. Clearly, timely after-action review and incorporation of les-

sons learned are essential for any organization to learn from its experiences with disaster response.

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REFERENCES

1. Cancio LC, Horvath EE, Barillo DJ, et al. Burn support for Operation Iraqi Freedom and related operations, 2003 to 2004. *J Burn Care Rehab* 2005;26:151-61.
2. Anonymous. *The World Factbook: 2006*. Washington, DC: Central Intelligence Agency; 2006.
3. Global Security. Guam. Available at: <http://www.globalsecurity.org/military/facility/guam.htm>. Internet; accessed July 28, 2006.
4. Cancio LC, Pruitt BA Jr. Management of mass casualty burn disasters. *Int J Disaster Med* 2004;2:114-29.
5. Condon-Rall ME. *Disaster on Green Ramp*. Washington, DC: Center of Military History, U.S. Army; 1996.
6. Greenfield E, Winfree J. Nursing's role in the planning, preparation, and response to burn disaster or mass casualty events. *J Burn Care Rehab* 2005;26:166-9.
7. Topley DK, Schmelz J, Henkenius-Kirschbaum J, et al. Critical care nursing expertise during air transport. *Mil Med* 2003;168:822-6.
8. Anonymous. Concept of Operations for the Critical Care Air Transport (CCAT) Team. Scott AFB, IL: Headquarters, Air Mobility Command, U.S. Air Force; 26 October 2001.
9. Anonymous. Aircraft Accident Report: Controlled Flight into Terrain, Korean Air Flight 801, Boeing 747-300, HL7468, Nimitz Hill, Guam, August 6, 1997. Aircraft Accident Report NTSB/AAR-00/01. Washington, DC: National Transportation Safety Board; 2000. Available at <http://www.nts.gov/Publictn/2000/AAR0001.pdf>; Internet; accessed July 28, 2006.
10. Barillo DJ, Dickerson EE, Cioffi WG, et al. Pressure-controlled ventilation for the long-range aeromedical transport of patients with burns. *J Burn Care Rehab* 1997;18:200-5.
11. Anonymous. *Military Operations: Medical Emergency Management Planning (MEDCOM Pamphlet 525-1)*. Fort Sam Houston, TX: U.S. Army Medical Command; 2003.