



HAWAII STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

EMERGENCY APPLICATION – CERTIFICATE OF NEED PROGRAM

Application Number 04-18E

Applicant: American Medical Response
7575 Southfront Road
Livermore, CA
Phone: 925-454-6020

Project Title: Establishment of a helicopter air ambulance service for
Maui County
Project Address: 230 Hana Hwy. #10B, Kahului, Maui

1. **TYPE OF ORGANIZATION:** (Please check all applicable)

Public _____
Private X
Non-profit _____
For-profit X
Individual _____
Corporation X
Partnership _____
Limited Liability Corporation (LLC) _____
Limited Liability Partnership (LLP) _____
Other: _____

RECEIVED

'04 AUG -3 P 3:49

ST. HLTH. PLNG.
& DEV. AGENCY

2. **PROJECT LOCATION INFORMATION**

A. Primary Service Area(s) of Project: (please check all applicable)

Statewide: _____
O`ahu-wide: _____
Honolulu: _____
Windward O`ahu: _____
West O`ahu: _____
Maui County: X
Kaua`i County: _____
Hawai`i County: _____

3. **DOCUMENTATION** (Please attach the following to your application form):

- A. Site Control documentation (e.g. lease/purchase agreement, DROA agreement, letter of intent) **N.A.**
- B. A listing of all other permits or approvals from other government bodies (federal, state, county) that will be required before this proposal can be implemented (such as building permit, land use permit, etc.)

AMR has the following existing permits or approvals:

State of Hawaii, Maui County ALS ambulance service license

PHTI has the following existing permits or approvals:

FAA Part 91
FAA Part 135 Commercial Air Carrier Certification

- C. Your governing body: list by names, titles and address/phone numbers **ATT. A**
- D. If you have filed a Certificate of Need Application this current calendar year, you may skip the four items listed below. All others, please provide the following:
- Articles of Incorporation **ATT. B.**
 - By-Laws **ATT. C**
 - Partnership Agreements **ATT. D**

- Tax Key Number (project's location) **N.A.**

4. **TYPE OF PROJECT.** This section helps our reviewers understand what type of project you are proposing. Please place an "x" in the appropriate box.

	Used Medical Equipment (over \$400,000)	New/Upgraded Medical Equip. (over \$1 million)	Other Capital Project (over \$4 million)	Change in Service	Change in Beds
Inpatient Facility					
Outpatient Facility				X	
Private Practice					

5. **BED CHANGES.** Please complete this chart only if your project deals with a change in your bed count and/or licensed types. Again, this chart is intended to help our reviewers understand at a glance what your project would like to accomplish. Under the heading "Type of Bed," please use only the categories listed in the certificate of need rules.

NOT APPLICABLE

Type of Bed	Current Bed Total	Proposed Beds for your Project	Total Combined Beds if your Project is Approved
TOTAL			

ST. HLTH. PLNG.
& DEV. AGENCY
 RECEIVED
 AUG - 3 P 3:49

6. **PROJECT COSTS AND SOURCES OF FUNDS**

A. List All Project Costs:

AMOUNT:

- | | | |
|----|---|---------------------|
| 1. | Land Acquisition | _____ |
| 2. | Construction Contract | _____ |
| 3. | Fixed Equipment | _____ |
| 4. | Movable Equipment | _____ |
| 5. | Financing Costs | _____ |
| 6. | Fair Market Value of assets acquired by
*
- lease, rent, donation, etc. | <u>\$ 1,750,000</u> |
| 7. | Other: _____ | _____ |

TOTAL PROJECT COST: \$ 1,750,000

B. Source of Funds

- | | | |
|----|----------------------|-----------------------|
| 1. | Cash | _____ |
| 2. | State Appropriations | _____ |
| 3. | Other Grants | _____ |
| 4. | Fund Drive | _____ |
| 5. | Debt | _____ |
| 6. | Other: _____ | <u>\$ 1,750,000 *</u> |

TOTAL SOURCE OF FUNDS: \$1,750,000

* American Medical Response (AMR) will contract with Pacific Helicopters for the use of a helicopter air ambulance worth \$ 1,750,000. AMR will not incur capital costs itself, but will only pay for the use of the unit as provided in the annual contracts. Please see Attachment D, Agreement between AMR and Pacific Helicopters.

7. **CHANGE OF SERVICE:** If you are proposing a change in service, then please briefly list what services will be added/modified. Be sure to include the establishment of a new service or the addition of a new location of an existing service. Please

reference the Certificate of Need Rules Section 11-186-5 for the categories of services. If you are unable to determine which category best describes your project, please consult with agency staff.

Addition of helicopter air ambulance service

RECEIVED
SEP -9 12:07
ST. HLTH. PLNG
& DEV. AGENCY

8. **Implementation Schedule**

- a) **Date of site control.** Not applicable. Pacific Helicopters Tours, Inc. ("Pacific Helicopters") already controls the site at which the helicopter will be based at Kahului airport.
- b) **Dates of other government approvals.** No other government approvals are necessary. The helicopter has been used as an air ambulance since 1999 (serving Kaho'olawe) and has all necessary FAA permits and approvals. American Medical Response Inc. ("AMR"), which has used the helicopter to provide the ambulance service for Kaho'olawe, already has the necessary State license.
- c) **Dates by which financing is assured.** No capital financing is required, since use of the capital equipment (the helicopter and medical equipment) will be part of the annual operating expenses. There will be an annual operating deficit which will be offset by appropriations from the State and the County of Maui. Both of these subsidies are available as of August 1, 2004.
- d) **Date construction will commence.** Not applicable.
- e) **Length of construction period.** Not applicable.
- f) **Date of completion of the project.** September 2004
- g) **Date of Commencement of operation.** September 2004.

9. **Executive Summary**

Nature of the Emergency. Section 11-186-99 Hawaii Administrative Rules ("HAR") provides for emergency CON applications where there is "a state of affairs involving an actual substantial injury to public health or where there is a clear and present danger of such an injury occurring."

We believe there is a clear and present danger to the public health if the service is unable to begin operations in September 2004, as is now scheduled. If SHPDA permits an emergency CON application, the application could be processed and approved September 2004. Any delay could result in death or serious injury to members of the public who need the service of a helicopter air ambulance, but are unable to get it. The aircraft will be used to transport patients in emergency situations (where a time delay could result in a bad outcome). Moloka`i, Lana`i and remote areas of Maui, such as Hana, are particularly vulnerable. We present the following two examples of Maui County emergency cases where the presence of the helicopter could have saved a life.

1. A 45 year old female involved in a motor vehicle crash with chest and spinal cord injuries in critical condition on the west side of Molokai. Ground transport to Molokai General Hospital was 50 minutes, fixed wing air ambulance was 2.5 hours from Honolulu to Molokai, flight time to Honolulu airport was 30 minutes, ground transport from Honolulu airport to the trauma center at Queen's was 15 minutes. Total elapsed time from the incident to treatment at the trauma center was 4 hours and 5 minutes. The patient died 2 hours later, primarily from "blood loss." If the Maui helicopter had been available, the time from helicopter lift-off to the scene would have been about 15 minutes, with an additional 15 minutes from the scene to the trauma center, for a total time of about 30 minutes. This would have been a time savings of about 3 hours and 35 minutes, and likely would have saved the life of the patient.

2. A 27 year old male near Hana fell 15 feet from rock to the ground. Upon ambulance arrival the patient was conscious but complaining of abdominal pain. The patient was transported to the Hana Community Health Center and stabilized as best as possible, but without the benefit of blood transfusion since no blood is stored at the site. The air ambulance was dispatched from Honolulu with an ETA of 2 hours. The patient was then transported by fixed wing air ambulance to the airport at Kahului, and then by ground ambulance to Maui Memorial Medical Center ("MMMC"). He died as he was being taken to surgery. The cause of death was a lacerated spleen. The total time from incident to arrival at the hospital was about 2 hours and 45 minutes. Again, the helicopter could have transported this patient to MMMC within about 30 minutes, and it is likely that his life could have been saved.

There is a precedent for granting emergency CON review to a helicopter air ambulance. In 1999 the agency approved such an application (#99-05E) from Pacific Helicopter and AMR for a helicopter ambulance service on Kaho`olawe as part of the unexploded ordinance clearance and environmental restoration project. Clearly, the danger on Kaho`olawe was high, but the population at risk was small. For the three islands of Maui County we have a much higher population (128,241 residents in 2000) which is at risk of death or serious injury every day this important service is unavailable.

Summary of the proposal. AMR is proposing to establish a helicopter air ambulance service for the islands of Maui County. AMR is now contracted by the State to provide the emergency ground ambulance service within Maui County. That contract between AMR and the State (Attachment E) has been expanded to include a helicopter air ambulance service. AMR, which provided the helicopter ambulance service for the recently-completed Kaho`olawe unexploded ordinance clearance project, already has the appropriate State license for the helicopter service.

AMR will subcontract with Pacific Helicopter, which will provide the medically-equipped helicopter, flight staff, ground crew, maintenance service and other such service. The helicopter, a Bell 222, is already owned by Pacific Helicopter. It is the same helicopter as already approved for ambulance service under CON 95-05E. It is already configured as a helicopter ambulance, equipped at the advanced life support (ALS) level, and has been used for the Kaho`olawe project.

AMR will supply the medical component of the service, including the medical crew on the helicopter.

The helicopter will be stationed at the Kahului airport, and will have a pilot standing by 24 hours a day. When it is called for an emergency, the pilot will fly to Kula and pick up the appropriate emergency personnel: emergency medical technicians (EMTs) and/or mobile intensive care technicians (MICTs). The Kula ambulance is staffed 24 hours per day to serve as primary helicopter paramedics. In the event that the Kula paramedics are already on an ambulance call, there will be back-up paramedic coverage staffed by the Wailea ambulance unit. We estimate that the flight to Kula and Wailea will take about 5 minutes. We had considered having emergency medical staff standing by at the airport, but determined that it is much more efficient to increase the staff at the Kula ambulance station, where they will improve the availability for ground service as well as air transports.

The helicopter will be able to fly to emergencies on all four islands (including Kaho`olawe) of Maui County. Since it is dangerous and difficult to fly to many emergency scenes, ground ambulances will transport the patient to pre-designated landing sites around the county. The helicopter can also land at the hospitals on the islands to pick up patients. Patients can then be flown to MMMC or a facility on O`ahu, whichever is more appropriate. On O`ahu, there are landing pads at Queen's, Kuakini, Kaiser, Tripler and St. Francis West. Based on past experience, we anticipate the majority of patients would be transported to Queen's, which has the State's most advanced trauma center.

We project a total of 125 transports annually in our planning. Rapid transport of emergency cases is crucial for many patients, such as trauma cases, heart attacks and cerebrovascular accidents ("CVAs"). If these patients can reach treatment within the "golden hour," their chances of survival and successful

rehabilitation are greatly improved. We have provided an example of two such cases in the narrative above.

RECEIVED

AUG -3 P 3:50

T. HLTH. PLNG.
& DEV. AGENCY

The annual operating expense of the service is estimated to be \$1,223,000. The operating expenses will be subsidized by the State and the County of Maui. The State and County subsidies have already been appropriated and committed. Both the State and County of Maui will make funds available effective August 1, 2004.

A. Relationship to the H2P2 Criteria

The Hawaii Health Performance Plan (H2P2) **goals** include: increasing "the span of a healthy life for Hawaii residents," reducing "health disparities among Hawaii residents," and achieving "equitable and effective access at a reasonable cost for all Hawaii residents to health services that are responsible to the holistic needs of community's members." The proposed helicopter air ambulance service meets all these goals. Rapid access to emergency care, especially meeting the "golden hour" standard, will save and extend lives. Many Maui County residents suffer a relative disparity in longer time and distance to emergency care, and that disparity will be lessened by this service. The service will also provide more effective and equitable access to emergency care.

The H2P2 articulates basic **principles** for a health care delivery system: "A . . . system that is comprehensive, cost effective, well coordinated and responsive to community/regional needs . . ." The proposed helicopter ambulance meets all these principles. It fills a gap in services, is integrated into the existing EMS system, and addresses the second priority need established by the Tri-Isle SAC: "Emergency Medical Services+; Ground+; Aeromedical (helicopter)." Although the revenue from fees is not enough to meet the expenses, the system is still cost-effective because it will reduce mortality and morbidity, thus saving and extending productive lives.

Included in Chapter III of the H2P2 is a statement of the Maui County "Tri-Isle" Subarea Values and Priorities. The first value for the health care system in Maui County is "accessible/easy access." This proposal will greatly improve accessibility to important emergency care at levels from basic to tertiary.

Finally, the Tri-Isle SAC identified 5 main priorities. The second of these (as noted above) is "Emergency Medical Services+; Ground+; Aeromedical (helicopter)." This proposal directly responds to this priority.

Chapters IV through XI of the H2P2 discuss various diseases and conditions. The most pertinent ones addressed by this proposal would be in Chapter VII, Heart Disease and Stroke. This proposal directly addresses process measure HDP-10 "number of persons receiving thrombolytic therapy when appropriate." It also indirectly addresses HDP-9 "time from emergency department (DE) arrival

to treatment with thrombolytic therapy for AMI and thromboembolic stroke unless contraindicated." The helicopter will be able to deliver most patients who need such therapy within the "golden hour," as opposed to the current system which can frequently take hours to deliver the patient. The proposal also addresses outcome measures such as HCD-6 and HCD-7 which relate to deaths from heart disease and stroke. The availability of the helicopter will certainly save some lives which would otherwise be lost.

Summary. The H2P2 states that the basic principles of a health care delivery system include a system that is comprehensive, cost-effective, well-coordinated and responsive to community/regional needs. Based on the foregoing, the proposed helicopter ambulance will make the health care delivery system in Maui County more comprehensive, cost effective, well-coordinated and responsive to community/regional needs

B. Need and Accessibility Criteria

The service area of the proposed project is the County of Maui, with a resident population on its three islands of 128,241 in 2000, according to the U.S. Census. We have conservatively estimated that there will be 125 transports in the first year of operation. This estimate is derived from our experience with the helicopter ambulance on the Island of Hawai'i.

Currently, there is no helicopter air ambulance service in Maui County. An ALS helicopter ambulance service is necessary to meet the needs of the people of Maui for state-of-the-art emergency service. (Such service is already available on O`ahu and Hawai'i). It is crucial for many patients (especially trauma, heart and CVA cases) that they arrive at a facility with definitive treatment within the "golden hour." There are many remote places on the three islands where it is impossible to achieve this standard through basic ground transportation, or through ground transportation combined with the existing fixed-wing air ambulance. Also, there are many instances of cases on the Lahaina side of Maui where traffic is so congested that it takes a relatively long time for the ground ambulance to arrive at MMMC. Finally, there are patients in urgent need of tertiary or specialized care which is only available on O`ahu, especially the trauma center at Queen's.

Helicopter ambulance service already exists on O`ahu and Hawai'i. There used to be a helicopter service in Maui County, which demonstrated its importance, but which was forced out of business because of the low reimbursement rates from third party reimbursers.

Accessibility. The services will be accessible to all patients who need it. Services will be provided without discrimination based on race, age, ethnicity, income, religion, gender or any other category.

RECEIVED

C. Quality of Service/Care Criteria.

AMR is an existing provider of ALS ambulance service in the State of Hawai'i. We are the sole provider of ground ambulance service in the Counties of Maui and Kauai. We also provide non-emergency ALS service for O`ahu and Hawai'i, and emergency backup services to the O`ahu City and County EMS and the Hawai'i (County) Fire Department.

We also have experience in providing helicopter ambulance service for the Kaho'olawe project.

We have built a strong reputation of providing the highest quality of ALS patient care throughout the State of Hawai'i. We are fully licensed, and our staff is trained, certified and experienced.

D. Cost and Finances Criteria.

Capital cost. No capital funding is required by AMR, since the helicopter will be sub-contracted from Pacific Helicopters, and there will be no cash financing or other debt. The contractual cost will be expensed in AMR's annual expense statement. The helicopter has been in use for 5 years as part of the Kaho'olawe project. Its capital value has been depreciated according to standard accounting procedures, but Pacific Helicopters has refurbished the aircraft to put it in "excellent condition" for this new service. The capital value is now estimated at \$1,750,000.

Operating expense. The annual operating expenses are estimated to be \$1,223,000. Please see Exhibit 1 on page 12 for details. (In the first year of operation, FY 2005, the service will operate for the last 11 months only. There is no budget beyond the first year of operation, since subsequent budgets will depend on several variables, including: actual experience in the first year of operation; discussions and negotiations with the Department of Health; and, appropriations from the Legislature and the County Council). The operating expenses for year one will be subsidized by the State and the County. The State and County subsidies (\$611,500 each) have already been appropriated and committed. The source of the funding is through the State General Fund.

Operating revenue. Operating revenue will be generated by the State of Hawaii. Patient and third party reimbursements will be billed, collected and deposited by the State of Hawaii into the State General Fund. We estimate actual revenue from the transfers to be \$168,750, calculated as follows:

$$\begin{aligned} 125 \text{ transports} \times \$2250 \text{ State fee/transport} &= \$281,250 \\ \$281,250 - 40\% \text{ bad debt and contractual adjustments} &= \$168,750 \end{aligned}$$

The service is financially feasible, even though revenue from patient fees is well below the actual expense; both the State and the County of Maui recognize the importance of the service and have committed to subsidizing the operating expenses on a 50-50 basis.

RECEIVED
04 AUG -3 P3:50

E. Relationship to the Existing Health Care System Criteria.

ST. HLTH. PLNG.
& DEV. AGENCY

The proposal relates well to these criteria. The availability of the helicopter will reduce mortality and morbidity for Maui. Helicopter ambulance service has now become state-of-the-art emergency service, and should be available to a community the size of Maui County. Its absence from Maui, leaving only ground and fixed wing transport, means that there is a gap in the emergency services system. This gap will be filled and the system enhanced when the helicopter is available.

The service will be integrated into the existing EMS service of Maui and the State. It will also be fully integrated into the hospital systems of Maui and O`ahu.

F. Availability of Resources.

The proposal meets these criteria. No up-front capital resources are needed for the helicopter and its equipment, since they will be sub-contracted by AMR from Pacific Helicopters.

The resources to operate the service are available. Patient revenue will not meet the expenses, but subsidies from the State and County of Maui will offset the losses.

The flight crew, maintenance and air operations will be provided by Pacific Helicopters as part of its sub-contractual agreement with AMR. Most importantly, Pacific Helicopter will have a pilot standing by 24/7.

The EMS crew itself will be provided through existing EMTs and MICTs staffing the ground ambulance station at Kula. This Kula staff has just been increased for two purposes: (1) to improve the availability of ground service from the Kula station; and, (2) to have staff available for the helicopter. We anticipate that the normal EMS crew on the helicopter will consist of 1 EMT and 1 MICT.