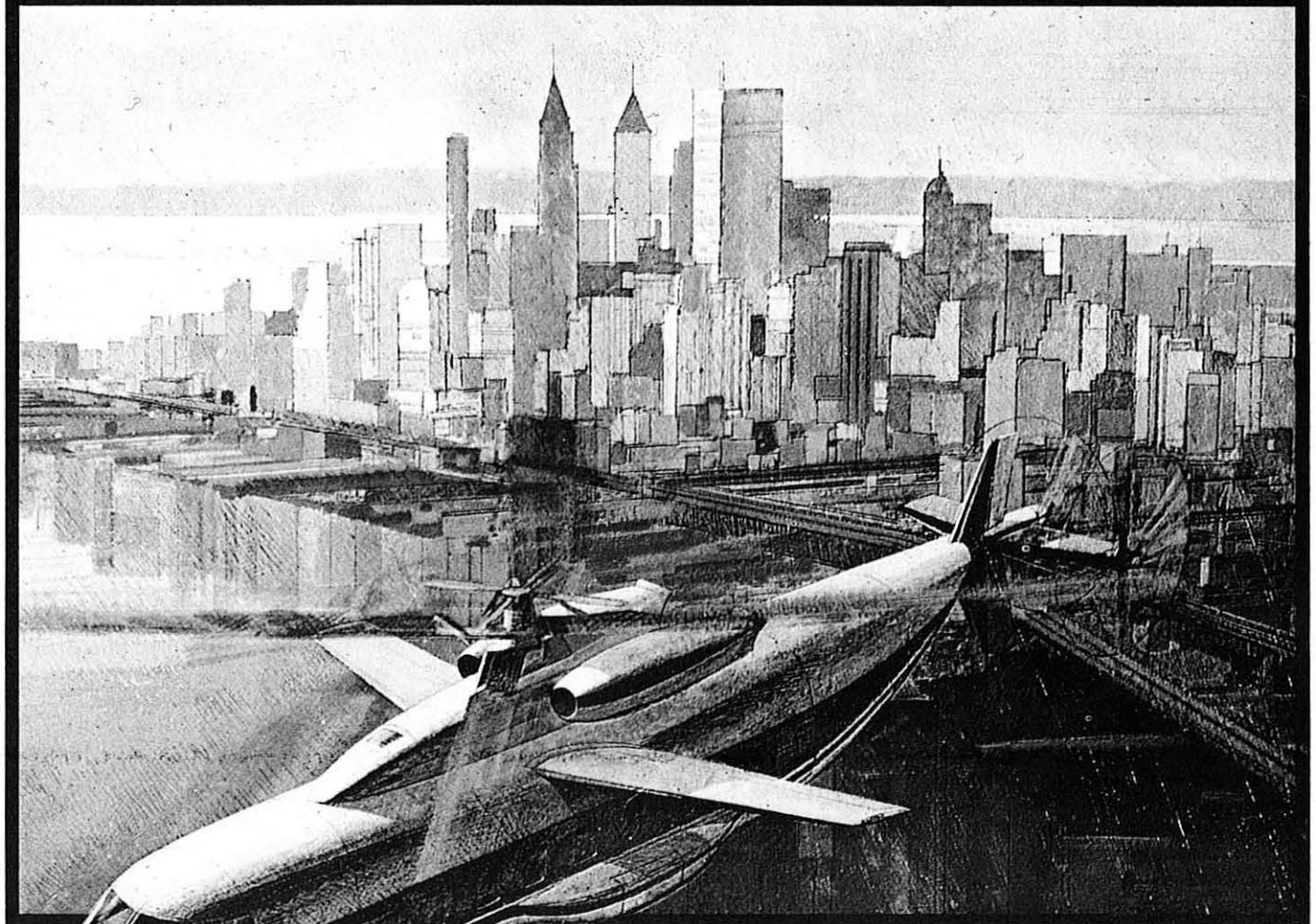


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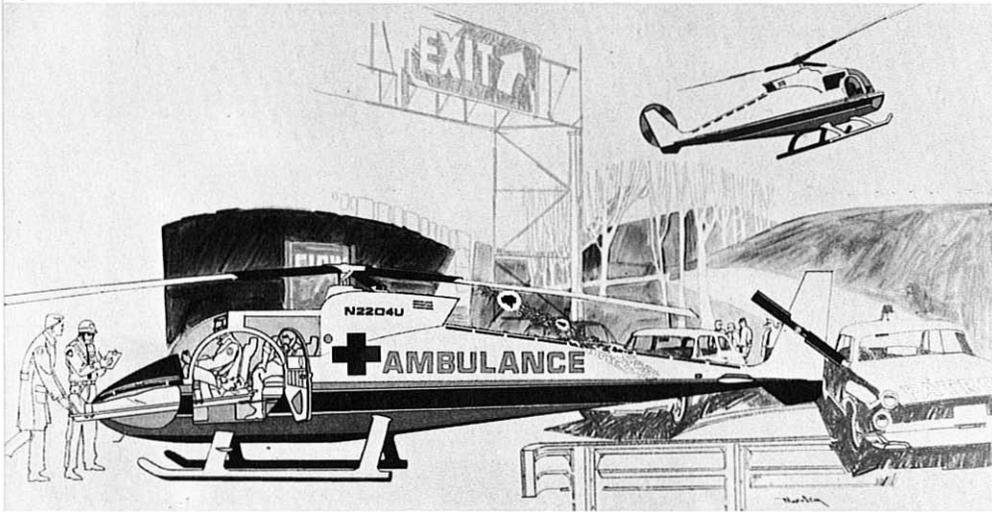
**Emergency Helicopters
Can Cut Highway Death Rate**

Emergency Helicopters Can Cut Highway Death Rate

Pennsylvania test program to demonstrate effectiveness of Highway Helicopter Patrol in saving lives of accident victims began last November, will run for a full year

by Jean Ross Howard

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First sketch of new Brantly 305 ambulance configuration shows front-loading provisions for litters.

“MEDICALLY EQUIPPED HELICOPTERS could save as many lives airlifting accident victims from U. S. highways as they do rushing the wounded in Viet Nam to medical help.”

This declaration was made by Transportation Secretary Alan S. Boyd at a recent highway safety conference. Boyd added that the helicoptering of Viet Nam wounded to field hospitals in minutes has resulted in a major increase over past wars in the number of wounded who recover. And he said it is possible and practical for the techniques learned at the battlefield to be applied on the highway safety front.

On an average day, 130 persons in the U.S. will die in highway crashes. In an average year, there will be more than 53,000 deaths and 1,900,000 disabling injuries.

Put in another way, in one year there are more highway casualties in the U.S. than the total killed in all of the major wars in our history.

In an effort to reduce drastically the appalling loss of life and prop-

erty on the nation's highways, Congress in 1966 enacted two laws which will affect every citizen: the Highway Safety Act and the Motor Vehicle Safety Standards Act. The Dept. of Transportation was charged with implementing these Acts, and the National Highway Safety Bureau, headed by Dr. William Haddon Jr., was created to administer them.

As a first step, the Highway Safety Bureau sent a draft proposal of criteria for emergency medical services and highway safety to the governors of the fifty states asking for comment, and further requesting that implementation of the standards as finally approved must begin by Dec. 31, 1968.

These draft criteria include proposed standards for ambulance service—in certain areas for helicopter ambulances and hospital heliports. Under the FY 1968 budget, multi-million-dollar funds will be available for the planning of demonstration projects which will include tests of helicopter ambulances.

The Bureau so far has contracted for five studies. These are:

□ Stanford Research Institute, Palo Alto, Calif., to carry out a complete study on a methodology of surveying a state's emergency facilities. Report to be available after July 1, 1968.

□ Dunlap and Associates Inc., Darien, Conn., for standards for ambulance services.

□ National Association of Counties, Washington, D. C., to determine the best ambulance services in use today and recommend future systems.

□ Franklin Institute, Philadelphia, Pa., to plan demonstration techniques in emergency treatment, communications and transportation, and recommend demonstration sites, the planning stage to be completed by April 1968. Helicopters will be used in the transportation demonstrations.

□ Communications Systems Inc., Paramus, N. J., to study communications requirements for the highway system.

Other studies planned will include the use of helicopters for evacuation of injured, extrication of injured from wreckage, and removal of debris from the highway.

The Highway Safety Bureau relies on the U. S. Public Health Service, the American Medical Assn. and the American College of Surgeons for advice on emergency medical treatment.

Pennsylvania was the first state authorized to conduct a helicopter highway patrol test under the National Safety Act of 1966.

Using matching state and federal funds, Copters Inc., in cooperation with the State Police, State Department of Health, Pennsylvania Department of Highways and Pennsylvania Aeronautics Commission, is providing the aircraft and operating a 14-hour daily patrol from the Pennsylvania State Police Barracks in Philadelphia.

The 12-month test patrol, inaugurated in November 1967, uses one Bell 47-J2A helicopter with a second helicopter for backup. The patrol helicopter is equipped with special large doors, manufactured by Bell Helicopter Co., which permit the installation of one inside litter while leaving space for a special medic-trained state trooper.

Five Philadelphia area hospitals also are cooperating by providing heliports and medical staff for the patrol helicopter.

In Philadelphia, where nearly everyone may read the *Bulletin*, since 1964 nearly everyone also has been listening to the Go Patrol traffic

'copter operated by Copters Inc. Twice a day, five days a week, the Go Patrol report is heard over 10 AM and four FM radio stations in the Philadelphia area. With this "dial-wide" broadcasting, Go Patrol probably is one-of-a-kind among the more than 44 city traffic 'copters in the nation.

And since 1964, the Go Patrol, in cooperation with the State Police and the Lakenau Hospital, has provided a "Helicopter Emergency Life-Saving Plan"—known as HELP. The Go Patrol has an impressive communications network which links the helicopters with the HELP operations office, four squad cars, two tow trucks and the police radio network. The squad cars and trucks are equipped for emergencies with gasoline, tires, tools and first aid supplies. When the pilot of the traffic 'copter spots a highway accident, HELP gets there fast.

Now with four state agencies and hospitals cooperating, with matching state-federal funds, and with an ambulance helicopter, Copters Inc. can provide experienced know-how for the nation's first highway helicopter patrol test.

In Michigan, the Superior Ambulance Service, serving an area within a 75-mi. radius of Detroit, has just added a helicopter to its fleet—a Bell 47. Superior is the first land ambulance company to offer helicopter service. Use of larger doors available from the manufacturer gives



Ambulance version of Bell JetRanger provides space for two inside litters.

space for two inside litters.

The lightweight litters used by Superior were manufactured by Ferno-Washington Inc. of Greenfield, Ohio. These aluminum-frame, neoprene-nylon litters are equipped with four wheels, and can be folded and stored in the helicopter's baggage compartment. In this way, the helicopter can be converted in minutes from a passenger or cargo vehicle to an ambulance.

The Superior helicopter is maintained and operated by Hi-Lift Helicopters at Westland, Mich. A second set of litters is available for the backup helicopter provided by Hi-Lift—a Bell 47-J2A.

Walter Gutowski, Superior's president, reports community acceptance of this aerial ambulance service has

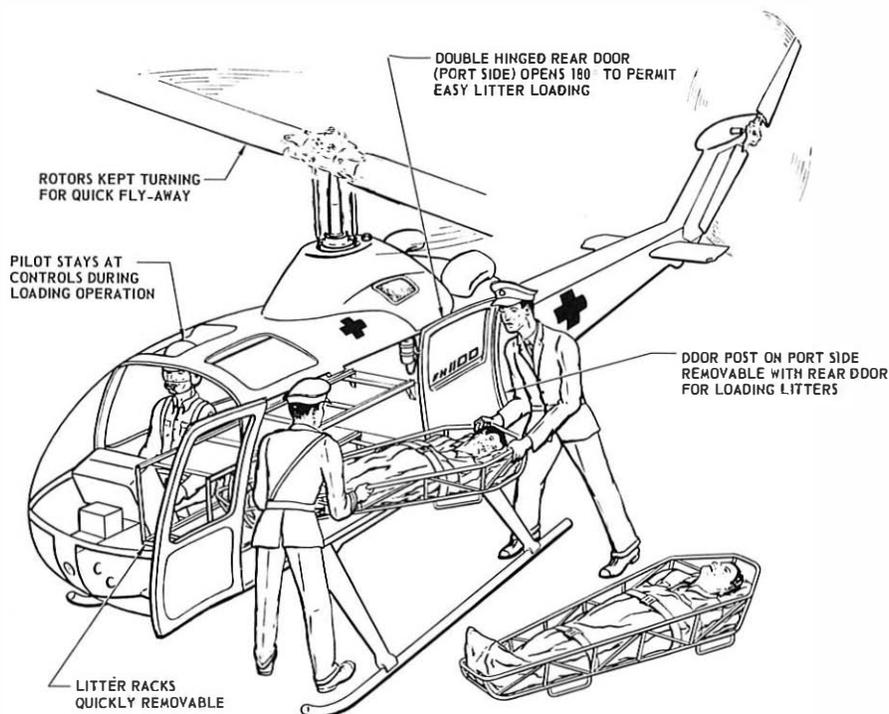
been encouraging. Three hospitals in the area—Beyer Hospital, Ipsilanti; University of Michigan Hospital, Ann Arbor; and the Garden City Osteopathic Hospital—are planning to provide heliports. The Garden City Hospital administrator predicts the aerial transport of osteopathic patients between hospitals, for which the hospital is legally responsible, will prove much safer than land ambulance.

As a public service, the Chicago Police and Fire Departments now provide a helicopter highway patrol. Using the available radio network, the patrol can be alerted to an accident, fly to the site and transport the casualties to the Trauma Center at Cook County Hospital. The hospital's ground-level heliport (50' by 50', fenced, lighted, paved and marked) is just off the expressway, close to the entrance of the emergency clinic.

William H. McCoy, hospital administrator, reports that during the first six weeks of this public service, more than a dozen casualties have been flown to the hospital. Burn and explosion cases, as well as accident victims, have been treated in the hospital's Burn and Trauma Centers. Both Police and Fire Departments feel the helicopter is proving invaluable for rescue, and patient acceptance of the aerial ambulance has been excellent.

During the unprecedented 1967 snowstorms in Chicago, helicopters became one of the few modes of transportation functioning. They not only delivered patients, doctors, nurses, blood plasma and special drugs to hospitals, but delivered insulin and food to shut-ins. In still another help to those stranded in their homes, helicopters were used to repair lines supplying heat, light and communications to thousands of homes from Wisconsin to Indiana.

Nebraska also has proposed a helicopter patrol, initially of Interstate Highway 80. Two state-owned



Fairchild Hiller FH-1100 will be shown for first time in ambulance configuration at the Helicopter Assn. of America convention in Las Vegas this month.

Sikorsky H-19 (12-place) helicopters would be operated by the Nebraska National Guard. In an important part of this proposal, the College of Medicine of the University of Nebraska would provide a complete analysis of each accident victim.

In its 21 years of commercial service, in times of disaster, the helicopter has been welcomed everywhere. But when the snow melts and the water recedes, by many the helicopter is regarded as a nuisance and even today is not permitted to land inside the city limits of many of our metropolitan centers. Not only hospital heliports but city-center landing facilities are needed to let the helicopter serve the community to its fullest capacity.

In addition to the available modifications providing inside litter installations for the smaller, piston-powered helicopters, manufacturers are designing ambulance configurations of the newer, larger turbine-powered helicopters. Many of these will be on display at the annual convention of the Helicopter Assn. of America in Las Vegas this month.

Bell Helicopter Company, Fort Worth, Tex.—The JetRanger (Model 206A) ambulance configuration will have two inside litters with space for the pilot and an attendant. These litters when not in use can be carried in the baggage compartment. The JetRanger has a range of 350 nautical miles and a maximum speed of 130 kts. The JetRanger Ambulance will be available in mid-1968.

Brantly Helicopter Corporation, a subsidiary of Lear Jet Industries, Inc., Wichita, Kan.—The ambulance version of the Brantly 305 helicopter, in addition to the pilot and attendant, will provide front-loading for two inside litters. This medical-use helicopter will have a maximum speed of 135 mph and a range with useful load of 400 statute miles. Certification of the Brantly ambulance helicopter is scheduled for late 1968.

Fairchild Hiller Corporation, Aircraft Division, Hagerstown, Md.—The FH-1100 ambulance configuration provides side-door loading for two inside litters. In addition to the pilot, space is available for an attendant. The lightweight, basket-

type litters are Fairchild Hiller-manufactured. The FH-1100 has a range of 385 nautical miles and a maximum speed of 110 knots. The FH-1100 ambulance will be on public display for the first time at the HAA meeting, and certification tentatively is scheduled for spring 1968.

Hughes Tool Company, Aircraft Division, Culver City, Calif.—The Hughes 500 in the proposed ambulance configuration will have two inside litters, pilot and attendant. The Model 500 has a range of 383 nautical miles and a maximum speed of 130 knots.

Sud-Aviation, Paris, France (U. S. licensee: Vertical Aircraft International, Inc., Glendora, Calif.)—The Alouette II air ambulance provides side-loading for two inside litters, pilot and attendant. Equipped with telescopic litters, the helicopter can be converted to five-passenger configuration in minutes. It has a range of 450 miles and a maximum speed of 125 mph. The Alouette II air ambulance is certificated and in production. ■