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Air rescue service now also for Berlin!

Introduction

Rescue helicopters are in use in 22 centres throughout the Federal Republic of Germany but this modern supplement to the ground rescue services has so far been completely lacking in Berlin although the first 8 - 10 minutes are normally decisive for the chances of survival in the event of a serious injury or illness (e.g. heart attack). FRG statistics further reveal that 59% of people severely injured in accidents die within 30 minutes of the emergency occurring if they do not receive immediate medical aid.

A rescue helicopter (abbreviated in the following to RH) also permits immediate, comfortable transport to the nearest special clinic.

5 ambulances equipped with operating facilities (in comparison to Munich which has 33) are already stationed in West Berlin, but these vehicles run the risk of getting stuck in traffic jams in particularly urgent cases during the rush hour for example at weekends or in commuter traffic. These are then occasions where the more rapid, more flexible RH is lacking!

Experience gathered with helicopter rescue in a comparable area such as for example Hamburg - which will be discussed in greater detail - clearly shows that under conditions almost identical to those encountered in Berlin the RH is a meaningful and indispensable addition to the ground rescue service, particularly in a large city.

There are no reasonable grounds for withholding lifesaving possibilities, which have long since been taken for granted in the FRG, from the citizens of West Berlin. The safety of the people of Berlin, which is without doubt more restricted by the general political situation and the isolation of the city, should, by the stationing of a RH, be brought up to the same standard as that achieved years ago in the major cities of the FRG.

Thus the aim behind this exposé is to help to secure the basic approval indispensable in Berlin for the stationing and operation of a rescue helicopter and the organization behind it on a purely humanitarian basis from the Allied Powers who also assumed responsibility for the very life and security of the people of Berlin.

What does the S.O.S. air rescue service hope to achieve in Berlin? - motivation

In addition to the necessary approval of the Allied Powers with regard to aviation and sovereignty rights and the establishment of the organizational and technical basis for this project, the stationing of a RH in Berlin requires the commitment of a non-profitmaking upholder of the air rescue ideal which can also win over public support with its specialist knowledge and its non-profitmaking activities.

If the humanitarian ideal on which all rescue services are based (compare for example the major lifesaving organizations in America, England and France as upholders of the self-help cause!) is to have long-term success, it must be accepted by broad sectors of the population and supported by individual participation.

Only those organizations which are capable of addressing the populace directly will be in a position, by way of the good example of their humanitarian initiative, to activate everyone whose cooperation is essential and to cast aside the doubts which in similar situations were not able to curb the startup of active air rescue services in the FRG. Mrs. Ina von Koenig, the founder and president of the S.O.S. Flugrettung e.V., has been active on behalf of air rescue for 10 years (she was also responsible for founding the Deutsche Rettungsflugwacht - German Air Rescue!), and she it was, who together with the organization's committee members, took the decision to introduce an air rescue service in Berlin as a purely non-profitmaking group in conjunction with a suitable air transport company (Ferranti Helicopters).

Experience has shown that only such initiative can motivate all the responsible authorities. Air rescue in Berlin should not be frustrated by misconstrued profitability considerations or local politics, nor can it be organized by the state.

Numerous talks with the Berlin Senate, the Allied Powers, the press and influential potential backers have brought preparations to the stage where the next important step in the realization of the air rescue service is the obtaining of allied approval.

How does the S.O.S. air rescue service work?

The Organization, which is recognized as being non-profitmaking, is based upon the aeronautical experience of its founders and has appropriately trained employees at its disposal. It is financed exclusively from members'

and sponsors' contributions, donations and private contributions. Profitmaking on the part of the air rescue service is excluded by the articles of association.

On many occasions the S.O.S. air rescue service has saved lives, flown emergency patients to clinics which were then responsible for saving their lives, brought doctors to patients, transported paraplegics, human organs, blood plasma, medicines and serums, specialist teams of doctors and important medical equipment for special treatment by air and flown numerous transfer and repatriation flights including from other European countries.

The S.O.S. acts in accordance with the international principles of the Red Cross and when performing rescues makes no distinction as to the race, nationality or financial situation of the ill or injured requiring its aid.

S.O.S. only uses suitable aircraft, which are either fitted with all the medical equipment required by international standards or can be equipped with emergency facilities within 25 minutes. In addition to various types of rescue helicopter, twin-engined "airborne ambulances" (CESSNA, PIPER etc.) are on call and twin-engined jets (CORVETTE, GATES LEAR and FALCON 20 Mystere) are available for long-distance flights.

Thanks to close cooperation with hospitals specializing in accident cases specialists and first aid personnel can be summoned at short notice.

The technical prerequisites for such a service are provided by the International Alarm Centre of the S.O.S. air rescue service in Stuttgart which is manned round the clock (telephone 0711/705555 or telex 7 255 371).

The Administration operates on a minimal budget; the active committee members perform their duties on an honorary basis. The necessary aircraft are chartered as required.

How can the S.O.S. air rescue service operate in practice in Berlin?

(Charters, organization of rescue control station and use of helicopters)

Operating an air rescue service in Berlin requires an allied partner. This role is to be filled by FERRANTI HELICOPTERS. The contracts which have been prepared provide for a helicopter to be made available to the S.O.S. by FERRANTI for primary rescue purposes, for moving patients and for any other flights which the S.O.S. may be required to make in Berlin.

A hospital equipped to handle major accident surgery and with a landing area at its disposal is also a necessity. The Steglitz Hospital has been mentioned as a possible location in talks with the Senate.

FERRANTI will be providing the helicopter pilot and 2 stretchers in addition to installing the medical equipment provided by the S.O.S. and the cut-in radio system for 1 FuG 7 b. The helicopter will also be insured by FERRANTI in accordance with legal provisions and/or those specified by the Allies. The RH is fitted with a winch and must be able to carry 2 passengers. Maintenance, overhaul and refuelling are the responsibility of the company. The pilot must be in possession of the necessary licences and have command of the German language.

The rights and obligations of the S.O.S. and Ferranti are covered in a contract.

For its part, the S.O.S. will organize the rescue centre, prepare contracts with the health insurance funds, take care of acquisition, hold seminars, ensure an efficient rescue control station and make use of it in close cooperation with the existing facilities in West Berlin (fire brigade etc.). Administrative tasks, the settling of accounts and the assumption of administrative costs (possibly also for false alarms) will be the responsibility of the S.O.S. The Organization will also ensure that suitable landing areas are provided at the hospitals in question taking account of any regulations stipulated by the Allied air traffic authorities. The S.O.S. will also be organizing doctors and first aid personnel in addition to taking care of the acquisition and operation of medical equipment.

Further duties of the S.O.S. will be to compile rescue flight instructions, train personnel and instruct the pilot as to rescue procedures in the FRG. The helicopter will only be used in accordance with the agreed guidelines of the S.O.S.; the decision as to the technical feasibility of any particular flight lies with the pilot.

The sums agreed upon in the contract per month and flying hour will be paid to FERRANTI by S.O.S. for the chartering of the helicopter; these sums include all costs of providing, operating and maintaining the machine as well as helicopter personnel costs.

The enclosed sketch map of Berlin shows the radius which the helicopter can cover and the areas which are to be served. The locations of the existing ambulances equipped with operating facilities are also marked.

Estimated costs and financial resources are dealt with below.

Estimated costs and financing in the first year:

The following are the estimated costs of an ALOUETTE III for the first year:

a) Fixed costs	DM	65 000.--
b) 200 flying hours per annum = 16.66/month at DM 600.-- per flying hour		10 000.--
c) Flights from hospital to airport 5 h x DM 600.-- per month		3 000.--
d) Crew allowances per month		<u>2 500.--</u>
		80 500.--
i.e. per annum (12 x 80 500)	DM	966 000.--
Miscellaneous costs		<u>268 500.--</u>
	DM	<u>1 234 500.--</u> =====

The miscellaneous costs include for example mobilization costs, crew accommodation, hangar facilities for the helicopter, airport landing fees, subsistence allowances for the crew.

The estimated costs were worked out on the basis of an ALOUETTE III and represent an average value.

Financial resources

a) S.O.S. Flugrettung e.V. (10 000 members = 0.5 % of the population at DM 25.-- & sponsors)	DM 500 000.--
b) 600 calls ./ . 15 % false alarms = 520 calls at DM 950.--	484 500.--
c) Grant Land of Berlin	<u>250 000.--</u>
	<u>DM 1 234 500.--</u> =====

Note: as regards canvassing for members/sponsors, the S.O.S. will be working on the initially-mentioned basis that the rescue cause requires a broad basis amongst the population. At the same time the S.O.S. will be pointing to its wealth of practical experience in the repatriation of the severely injured and seriously ill, the costs of which (up to DM 10 000.--) are assumed by the S.O.S. in the case of members and sponsors. With the annual per capita contribution of DM 30.-- and DM 60.-- for families supporters of the rescue cause not only promote air rescue in Berlin, but also cover themselves against personal injury when holidaying in the FRG or abroad - which, considering Berlin's isolation and the hordes of holidaymakers, should not be dismissed lightly!

Importance and effectiveness of a RH in a large city

(Explained with figures taking Hamburg as an example)

Preliminary remarks: The following summary is based on a report compiled by Dr. E. Jungck, Dr. H. Walther, Dr. W. Hoerster and Dr. D. Klaucke from the Army Hospital in Hamburg, Department X (anaesthesia and intensive care). The full text was published in the conference report of the INTERNATIONAL AIR-RESCUE SYMPOSIUM, 9th - 10th September 1977.

Between 16.7.1973 and 10.6.1977 the BELL UH 1 D rescue helicopter belonging to Squadron 64 of the Federal Air Force (Bundesluftwaffe) was called out on a total of 2 455 occasions from the Army Hospital in Hamburg. During this period the hospital rescue centre answered roughly 6 000 calls with the emergency ambulance stationed there. Worthy of particular note: almost half the calls were answered by RH!

The helicopter was equipped with a winch for air-sea rescue. The crew comprised a pilot, copilot, accident specialist and medical orderly.

The helicopter was used primarily for the civilian population, soldiers only being affected in 44 cases! The helicopter was always alarmed via the emergency telephone number 112; the calls being passed to the hospital rescue centre from the operations centre of the Hamburg fire brigade via a direct link. On average the helicopter was airborne in 2 minutes being guided over the city with its large harbour installations and parks by way of coordinates transmitted by radio.

(The details of the to our knowledge first report of a RH flight in and over a large city emphasize the parallels with the opportunities offered in Berlin!)

"In Hamburg there is almost always a suitable landing area (car park, school yard, park, factory yard or major road junction) wherever an emergency might arise."

Many areas in Hamburg can only be reached by road with extreme difficulty (which is also true of Berlin!). During the unavoidable traffic jams which occur as a result of commuter traffic, it is often difficult if not impossible for the emergency ambulances which are stationed somewhat centrally at the large hospitals in Hamburg to reach the scene of an emergency quickly.

Further mean empirical values from Hamburg:

It is interesting to note that on average the RH had to cover 15.4 km to reach the scene of the emergency! Such a radius corresponds fairly closely to that which has to be covered by the emergency ambulances stationed in Berlin.

1.9 minutes passed between the alarm being given and the helicopter taking off. The RH reached its destination in 8 minutes (the time which doctors consider to be the outermost limit particularly in the case of patients with heart trouble). On the spot treatment lasted 17.6 minutes, transfer to the hospital 9.1 minutes with an average overall time per call of 39.4 minutes.

In Hamburg there is a clear emphasis on primary RH rescue calls with 798 traffic accidents (= 32.5 %) and 548 cases of acute, primarily internal illnesses (= 22.3 %).

These are followed by 307 industrial and occupational accidents (= 12.5 %) with domestic and sporting accidents etc. a distant third.

The medical treatment given at the scene of the accident or emergency frequently involves the restoration of cardiac and circulatory functions (960 cases = roughly 40 %). This figure is particularly stressed here since it points to the fact that of the emergency patients rescued by RH a large number were older people. This has some significance for Berlin where it is a well known fact that the average age is significantly higher than in the FRG (in Berlin 61 years).

Thus the much quoted "high percentage of senior citizens" amongst the people of Berlin can never be used as an argument against rescue helicopters as is unfortunately sometimes the case - in part certainly due to ignorance of the facts given here.

Medical treatment at the scene of the emergency was an absolute necessity in 1 308 cases, i.e. in 53.2 % of the emergency calls answered by the RH. However, even if the figures regarding the relative necessity of medical treatment are considered (e.g. quicker transport in a large city, comfortable transport etc.), then these 463 cases together with those mentioned above totalling roughly 72 % of all calls present a clear case in favour of the use of rescue helicopters in a large city even if emergency services are also available on the ground as is the case in Berlin!

The considerable number of cranial-cerebral traumas (392) reported from Hamburg in the diagnosis of emergency patients (= 31.6 %) underlines our view that only a hospital with so-called "major surgery" facilities and a fully equipped intensive care unit should be selected for the stationing of the RH in Berlin.

Summary of some particularly important arguments from
Hamburg:

- 1) The RH is a meaningful supplement to the emergency ambulance even in a large city.
- 2) The use of helicopters saves time even in a city.
- 3) No increased risk to aviation through urban use of a RH.
- 4) "The Hamburg model can be transferred to similarly-structured large cities."

This should be expressly stated here. Practical, proven experience has shown that the stationing of a RH in Berlin is a necessity. However, this S.O.S. air rescue service project in conjunction with FERRANTI HELICOPTERS can only be pursued if the Allied Powers give their basic approval, which we should like to end by emphatically requesting.