

THE TOLEDO EDISON COMPANY  
 DAVIS-BESSE NUCLEAR POWER STATION  
 EMERGENCY PLAN SUPPORTING PROCEDURES  
 REVISION INDEX

50-346

<u>Page</u>	<u>Revision</u>	<u>Procedures</u>	<u>Revision</u>	<u>Temporary Modification</u>
1	7	HP 1602.01	13	T-7196
		HP 1604.01	5	
		HP 1604.02	0	
		AD 1827.01	3	
		AD 1827.02	10	
		AD 1827.03	3	
		AD 1827.04	2	
		AD 1827.05	2	
		AD 1827.06	2	
		AD 1827.07	3	
		AD 1827.08	2	
		AD 1827.09	2	
		AD 1827.10	13	
		AD 1827.11	4	
		AD 1827.12	9	
		AD 1827.13	6	
		AD 1827.15	5	
		AD 1827.16	2	
		AD 1827.17	5	
		AD 1850.04	6	
		AD 1850.05	7	
		AD 1850.06	1	

Administrative Memorandums

	<u>Revision</u>
No. 37 ECS Pager and Telephone Numbers	30
No. 38 First Aid Team	12
No. 39 Fire Brigade	15
No. 41 Emergency Duty Officer (EDO)	28
No. 42 Radiation Monitoring Teams (RMT)	19

Revision 185  
 July, 1983

8308080221 830729  
 PDR ADDCK 05000346  
 F PDR

X005

## Davis-Besse Nuclear Power Station

Unit No. 1

Administrative Procedure AD 1827.02

Medical Treatment of Injuries

**NUCLEAR SAFETY RELATED**

Record of Approval and Changes

Prepared by	<u>Bob Peters</u>	<u>April 14, 1975</u>
		Date
Submitted by	<u>Terry D. Murray</u>	<u>6/9/75</u>
	Section Head	Date
Recommended by	<u>Jack Evans</u>	<u>7/8/75</u>
	SRB Chairman	Date
QA Approved	<u>NA/TM</u>	<u>                    </u>
	Manager of Quality Assurance	Date
Approved by	<u>Jack Evans</u>	<u>7/8/75</u>
	Station Superintendent	Date

Revision No.	SRB		APM		QA		Sta. Supt.	
	Recommendation	Date	Approved	Date	Approved	Date	Approved	Date
1	Jack Evans	1/13/76	NA		NA/TDM		Jack Evans	1/13/76
2	T. D. Murray	6/23/76	NA		NA/TDM		Jack Evans	6/29/76
3	T. D. Murray	4/5/77	NA		NA		Jack Evans	4/6/77
4	T. D. Murray	9/13/77	NA		NA		Jack Evans	9/13/77
5	<i>TD Murray</i>	<i>3/7/78</i>	<i>NA</i>	<i>3/30/78</i>	<i>NA</i>		<i>TD Murray</i>	<i>3/31/78</i>
6	<i>B. B. Boy</i>	<i>2/27/79</i>	<i>NA</i>		<i>NA</i>		<i>TD Murray</i>	<i>3/9/79</i>
7	<i>B. B. Boy</i>	<i>6/17/80</i>	<i>NA</i>		<i>NA</i>		<i>TD Murray</i>	<i>8/9/80</i>
8	<i>sm</i>	<i>3/30/82</i>	<i>NA</i>		<i>NA</i>		<i>TD Murray</i>	<i>4/2/82</i>
9	<i>sm</i>	<i>10/5/82</i>	<i>NA</i>		<i>NA</i>		<i>TD Murray</i>	<i>11/5/82</i>
10	<i>sm</i>	<i>7/6/83</i>	<i>NA</i>		<i>NA</i>		<i>TD Murray</i>	<i>7/15/83</i>

1. PURPOSE

- 1.1 To list and describe the methods of treatment of injuries including radiation casualties.

2. REFERENCES

- 2.1 Davis-Besse Nuclear Power Station Emergency Plan
- 2.2 EI 1300.02, Unusual Event
- 2.3 Administrative Memorandum No. 5, Accident/Injuries - Reports and Forms
- 2.4 Administrative Memorandum No. 38, First Aid Team
- 2.5 HP 1604.01, Personnel Decontamination
- 9 | 2.6 Administrative Memorandum No. 37 ECS Pager and Telephone Numbers

3. SCOPE

- 3.1 Priority for medical treatment will depend on the severity of the injury and whether it has radiological aspects or NOT.
- 3.2 A minor injury is an injury that, in the estimation of a First Aid Team Leader, requires only First Aid Treatment.
- 3.3 A major injury is an injury that, in the estimation of a First Aid Team Leader, requires professional medical treatment.
- 3.4 The order of medical treatment will be:
- 3.4.1 Care of major injuries
  - 3.4.2 Care of minor injuries
  - 3.4.3 Decontamination of personnel
  - 3.4.4 Monitor for Internal Contamination
  - 3.4.5 Definitive treatment and subsequent therapy as required.
- 3.5 The Davis-Besse Station has trained personnel and necessary equipment to respond to immediate First Aid requirements of injured personnel; in addition, the Medical Treatment Room on the 603' elevation of the Auxiliary Building adjacent to the Control Room elevator has sufficient supplies and equipment to allow a physician to treat many injuries locally, if necessary.

- 9 | 3.6 First Aid Response Equipment in the form of First Aid Trauma Kit, First Aid Suitcase, splints, back boards, Resuscitator and stretcher are located in a cabinet inside the cafeteria on the Turbine Deck 623' level.
- 3.7 The First Aid Team consists of a First Aid Team Leader and First Aid Team members. First Aid Team Leaders hold a minimum of Red Cross Multi Media Certification while First Aid Team members have received First Aid Training. First Aid Team Leaders/Members are identified in Administrative Memorandum No. 38, First Aid Team.

9 | 4. ACTIONS - WITHIN PROTECTED AREA

4.1 Actions of the injured person or any individual who discovers an injured person.

- 4.1.1 Notify the Control Room of the nature, extent, and location of the injured person(s).
- 4.1.2 Render life saving first aid as necessary.
- 4.1.3 Keep the Control Room informed of the status of the injured individual(s).
- 4.1.4 When the first aid team arrives, standby to assist the first aid team by:
1. Assisting first aid team as requested.
  2. Maintaining communications with the Control Room.

4.2 Actions of Shift Supervisor/Assistant Shift Supervisor

NOTE: Transportation of contaminated injured individual(s) constitutes an Unusual Event and requires action per EI 1300.02, Unusual Event.

- 4.2.1 Summon First Aid Team to the location of the injured person(s) by sounding the Initiate Emergency Procedures Alarm and announcing location and nature of emergency on the PA System. Unless the Shift Supervisor believes that additional help is necessary, all other personnel should be instructed to stand clear and that assembly according to the Emergency Plan is NOT required.
- 4.2.2 Request assistance from the Chemistry and Health Physics person in charge to determine if decontamination is needed.

- 4.2.3 Call the Secondary Alarm Station Operator, who will make medical treatment arrangements as per Section 4.4. of this procedure (AD 1827.02).

NOTE: If the event S.A.S. is unavailable to make medical treatment arrangements, the Central Alarm Station Operator should be notified to make necessary arrangements.

- 4.2.4 Contact the Davis-Besse Station Medical Coordinator when the moving of an injured victim(s) may be life threatening or professional medical advise is requested by the First Aid Team Leader. (Reference Administrative Memo No. 37, Attachment 2 for designated Medical Coordinators.)

NOTE: If contact with the Medical Coordinator cannot be made, contact the Magruder Hospital, 24 hour Emergency Room Doctor and relate accident and injury information.

- 4.2.5 Ensure that Security and the First Aid Team are notified of the impending ambulance arrival and give necessary instructions (i.e. access door, number of ambulances responding).
- 4.2.6 Send a man to the Gate Office (P.P.F.) to direct the ambulance.
- 4.2.7 Notify the Station Superintendent and the Chemist and Health Physicist.
- 4.2.8 The Station Superintendent or his designated representative will arrange for notification of the injured person(s) family.

NOTE: Some member of Station Supervision will accompany the man to the doctor or hospital. If the injury occurs during off normal hours, weekends or holidays, then a member of Supervision will be called to meet the employee at the doctor's office or hospital.

#### 4.3 Actions of the First Aid Team

- 4.3.1 Proceed immediately to the injured individual(s) with the First Aid Response Equipment.
- 4.3.2 Evaluate the extent of the injury and render First Aid as required.

- 4.3.3 Keep the Shift Supervisor assessed as to the status and degree of injury to person(s) involved.
- 4.3.4 The First Aid Team Leader shall use the following criteria in determining where and when to move the injured person(s).
1. If in his estimation, the injured person(s) should NOT be moved without Professional Medical Care, First Aid will be provided locally until Professional Medical treatment is available.
  2. If the injured person(s) requires immediate professional medical treatment and may be moved, he will direct the transportation of the injured person(s) to the nearest 585' elevation exit for ambulance pickup.
  3. If the injured person(s) does (do) NOT require immediate professional medical treatment, then:
    - a. Contaminated injured person(s) may be taken to the Medical Treatment Room and/or Decon Room for decontamination and further First Aid and/or Professional Medical Treatment.
    - b. Uncontaminated injured person(s) may be taken to the Medical Treatment Room for further First Aid and/or Professional Medical Treatment.

#### 4.4 Actions of the Secondary Alarm Station Operator (S.A.S.)

- 4.4.1 Contact the Carroll Twp. Emergency Medical Service (Ambulance) through the Ottawa County Sheriffs Office and relate the extent of known injuries. Refer to Administrative Memo 37, Attachment 2.

NOTE: Mid-County EMS (Ambulance) or Lift Flight Air Ambulance should be considered when backup ambulance support is required.

Refer to Administrative Memo 37, Attachment 2 for Mid-County EMS, or Attachment 2 of this procedure for Life Flight Air Ambulance.

- 4.4.2 Contact the H.B. Magruder Hospital, Nursing Supervisor to inform her of the extent of injuries and the impending ambulance arrival. Refer to Administrative Memo 37, Attachment 2.

NOTE: St. Charles Hospital has been designated as backup hospital support with the capabilities for care in the event of radiological emergencies. Refer to Administrative Memo 37, Attachment 2.

4.4.3 Contact the Edison Operator giving the injured individuals name and the nature of the injury. The Edison Operator will notify the individuals Supervisor, the Safety and Health Services Administrator and the Station Safety Coordinator.

4.5 Actions of the Chemistry and Radiation Tester (C&RT)

4.5.1 Proceed immediately to the scene of the accident.

4.5.2 Check area dose rate.

- a. If greater than 25 R/hr., the First Aid Team should move the injured party from the area as soon as possible or set up shielding to reduce exposure.
- b. If less than 25 R/hr., Do Not move the party until approved by the First Aid Team Leader.
- c. If an airborne or surface contamination hazard exists, inform the First Aid Team Leader that the victim should be moved as soon as feasible.

NOTE: Dose rate of 25 R/hr is recommended by the Station Medical Consultant, REMS Corporation.

5. ACTIONS - OUTSIDE PROTECTED AREA

5.1 Actions of the injured person or any individual who discovers an injured person.

5.1.1 Notify the Secondary Alarm Station Operator of the nature, extent and location of the injured person(s).

5.1.2 Render life saving first aid as necessary.

5.1.3 When the first aid team or ambulance arrives, stand by to assist the first aid team as required.

5.2 Actions of the Secondary Alarm Station Operator

5.2.1 Contact the Carroll Twp. Emergency Medical Service

(Ambulance) through the Ottawa County Sheriffs Office and relate the extent of known injuries. Refer to Administrative Memo 37, Attachment 2.

NOTE: Mid-County EMS (Ambulance) or Lift Flight Air Ambulance should be considered when back up ambulance support is required. Refer to Administrative Memo 37, Attachment 2 for Mid-County EMS or Attachment 2 of this procedure for Lift Flight Air Ambulance.

5.2.2 Contact the Edison Operator giving the injured individuals name and the nature of the injury. The Edison Operator will notify the individuals Supervisor, the Safety and Health Services Administrator and the Station Safety Coordinator.

## 6. DISCUSSION

### 6.1 Minor injuries

6.1.1 Move injured person(s), for injuries NOT requiring immediate professional medical treatment, to the Medical Treatment Room, taking care to minimize aggravating the person's condition. The Medical Treatment Room is located on the 603' elevation of the Auxiliary Building adjacent to Access Control. Immediate and temporary care may be given to a victim of an accident at this point.

### 6.2 Major injuries

6.2.1 In cases involving major injuries (except Section 6.2.2) transportation of injured personnel should be the Magruder Hospital (Port Clinton, Ohio) or Magruders designated back-up facility, St. Charles Hospital (Oregon, Ohio).

6.2.2 In cases of severe burns, severe eye injuries, uncontrolled bleeding or heart attacks, transportation of injured person(s) should be to St. Vincents Hospital. This can be done by the use of Life Flight-Emergency Air Ambulance Service (see Attachment 2).

### 6.3 Radiological

6.3.1 If the injury involves contamination, all efforts will be made to decontaminate the injured to below 220 dpm/100 cm<sup>2</sup>. If decontamination delays necessary medical treatment, the victim will be covered in such a manner as to avoid any spread of contamination and



appropriately shielded until medical aid can be obtained or hospitalization made.

6.3.2 Remove protective clothing and begin decontamination according to HP 1604.01, Personnel Decontamination, if required and only if this will NOT aggravate the injury.

6.3.3 For minor injuries personnel decontamination may be accomplished in the Personnel Decontamination Area located in the Auxiliary Building. This area contains showers, a large sink, wash basin, and necessary monitoring equipment.

6.3.4 In case of injury, both minor and major, medical attention should take precedence over contamination controls. In the event of any minor open wound in the RACA, the wound will be flushed with copious amounts of water and bleeding will be controlled as required. In cases of a puncture wound, forcing it to bleed will remove some contamination if present.

NOTE: Transportation of contaminated injured individual(s) constitutes an Unusual Event and requires actions per EI 1300.02, Unusual Event.

6.3.5 When hospitalization is required and contamination or its possibility exists, the ambulance driver, hospital and doctor shall be advised in advance. Precautionary measures to prevent spread of contamination shall be initiated, i.e., placing injured person on a cloth sheet and shielding him if required, providing the ambulance driver with TLD, dosimeter and protective clothing as required.

6.3.6 For each injury involving radiological complications, the C&RT individual should complete a Body Map, Attachment 1. Should the injured individual require transport to an off-site medical facility, the Body Map should accompany the individual to expedite recovery actions at the facility.

6.3.7 Should hospitalization be required, one Health Physics Technician should accompany the individual in the ambulance to the hospital. Should enough casualty victims exist which require more than one ambulance, only one Health Physics Technician is required. The Technician should accompany the first injured individual transported and wait at the hospital to provide

radiological assistance as the other casualties arrive.

9

NOTE: During off normal working hours, Health Physics Technicians should be cognizant of shift manning requirements. Contact should be made with the Chemistry and Health Physicist or his alternate, to obtain additional assistance.

6.3.8 Urinary bio-assay or whole body counts will be performed on all persons suspected of having received 10% of the maximum permissible body burden.

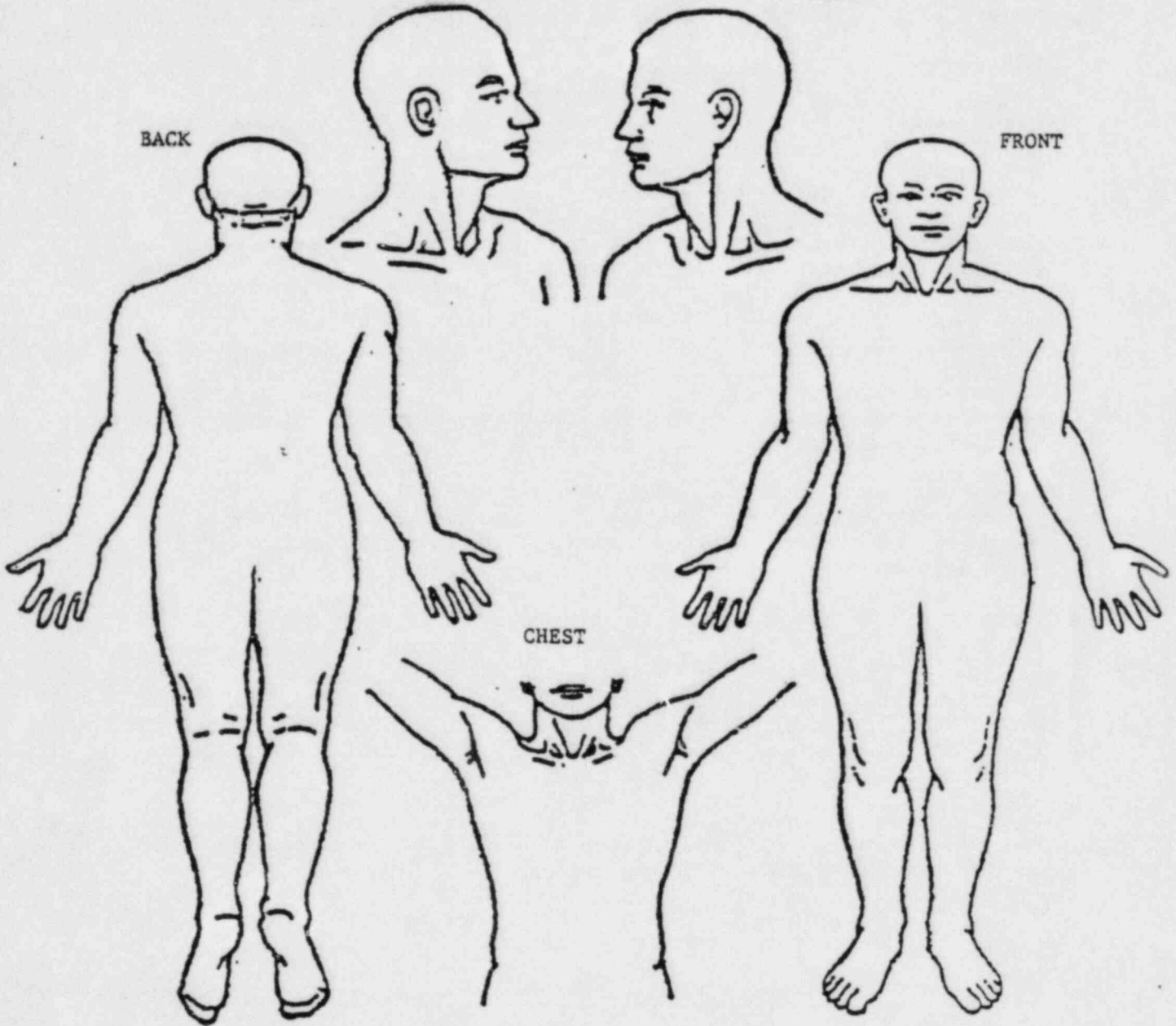
7. REPORTS

7.1 Reports of accidents and injuries shall be completed and processed in accordance with Administrative Memorandum No. 5, Accident/Injuries - Report and Forms.

BODY MAP

Indicate Contaminated Areas as to Location, Degree of Contamination, and Decon Effort

Indicate Location of Wounds  
RIGHT (use additional sheets if necessary) LEFT



8

Type of Meter Used: \_\_\_\_\_  
(indicate model and number)

Distance Skin-to-Probe: \_\_\_\_\_ in.

PROCEDURES FOR THE USE OF LIFE FLIGHT -  
EMERGENCY AIR AMBULANCE SERVICE

CONTENTSATTACHMENT PAGE NO.

	Background Information . . . . .	Page 1
	Procedure to Follow . . . Actions to Initiate Service . . . . .	Page 2
9	Instructions for Secondary Alarm Station Operator . . . . .	Page 3
	Safety Rules . . . for establishing and marking landing site . . . . . (for Security Supervisors)	Page 3 - 5

Life Flight, (an Emergency Room in a helicopter), rapidly transports a St. Vincent emergency physician, specialized registered nurse, life support medications and supplies to any medical emergency scene within a 130 mile radius of Toledo.

Life Flight transports the patient to the most appropriate hospital or hospital of choice, (Physician referrals are honored).

Medical treatment is begun at the scene, continued in flight, and the receiving hospital is alerted to the nature and severity of the injury or illness, and medical specialties needed.

Life Flight was initiated in coordination with the Regional Medical Services of Northwest Ohio (REMSNO). It augments existing primary ground emergency transportation systems and provides service 24 hours a day, seven days a week.

Since Life Flight is a self-contained emergency treatment center, it can carry a maximum of two adult patients at a time.

Most appropriately, utilization of this service at the Davis-Besse Nuclear Power Station should be limited to severe injuries and illnesses or treatment cases best suited to the use of available specialty service of St. Vincent's, (i.e., heart attacks or suspected heart attacks, eye injuries, burns, etc.).

However, designation of particular care facility, will be determined through contact with the Shift Supervisor.

9 | To Call Life Flight: (419) 241-5433 is the emergency number; the call is received simultaneously by REMSNO and Life Flight Communications Center.

9 | PLEASE NOTE: Contact must be made through the Secondary Alarm Station Operator (the phone number is shown here only for informational purposes and as an alternative measure, should contact with the Secondary Alarm Station Operator be unworkable).

## PROCEDURES TO FOLLOW . . . ACTIONS TO INITIATE SERVICE:

- 9 | \* The Shift Supervisor or his designee will contact the Secondary Alarm Station Operator and detail the following information which will be passed along to the Life Flight Dispatcher.
- 9 | \_\_\_\_\_ 1. This is           (your name & position)           calling from Davis-Besse, I am requesting that you call: 241-5433, to establish "Life Flight" Emergency Air Ambulance Service. Please provide the following information to the Life Flight Dispatcher:
- \_\_\_\_\_ A. - Type and extent of injuries . . .
- \_\_\_\_\_ B. - Call-back telephone number . . . 259-5663, D-B Control Room (for contact through Shift Supervisor with First First Aid Team Leader)
- \_\_\_\_\_ C. - Probable landing site/landing instructions . . .
- \_\_\_\_\_ D. - Patient's name and expected destination . . .
- 9 | \_\_\_\_\_ E. - Hold on the line until the S.A.S. Operator tells you to hang up
- \_\_\_\_\_ 2. Notify the Control Room that ext. 5663 must be kept open for possible incoming emergency information call.
- 9 | \_\_\_\_\_ 3. Request the Nuclear Security Supervisor to establish and mark landing area and to follow Safety Rules (attached to this procedure).
- \_\_\_\_\_ 4. Inform First Aid Team Leader that arrangements have been made and help is on the way . . . (This is extremely important to NOT only keep him informed but to enable him to comfort and reassure the injured).
- \_\_\_\_\_ 5. Ensure that a First Aid Team member or Operations person is designated to meet Life Flight and take medical personnel to the injured.
- \_\_\_\_\_ 6. Note arrival and departure times of Life Flight Service.

9 | INSTRUCTIONS FOR THE SECONDARY ALARM STATION OPERATOR TO INITIATE LIFE FLIGHT AIR AMBULANCE SERVICE

Upon receiving request from the field for this service, make certain that you obtain the following information to pass along to the Life Flight Dispatcher:

1. Caller's name, phone number, and location  
 Name \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Location \_\_\_\_\_  
 Time In \_\_\_\_\_
2. Type and extent of injuries or illness \_\_\_\_\_  
 \_\_\_\_\_
3. Call-back telephone number \_\_\_\_\_ (for D.B.: 259-5663, Control Room).
4. Address, cross streets, nearby landmarks, and nearest landing landing site \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
5. REPEAT INFORMATION BACK TO CALLER TO VERIFY ACCURACY.
6. INFORMATION COMPLETE?    Yes! Tell caller to hang up.  
    No! Tell caller to hold on.
- 9 | 7. Call 241-5433, (the call is received simultaneously by REMSNO and the Life Flight Communications Center).
8. Repeat information written above. Time Out \_\_\_\_\_
9. Follow normal, established procedures.

SAFETY RULES: (For Davis-Besse Security Force Supervisors) . . . For establishing and marking LIFE FLIGHT landing site and general precautions concerning aircraft.

A vital part of the total information supplied to the Life Flight Dispatcher is the - address, cross streets, nearby landmarks, and nearest landing site.

Due to plant architecture, our cooling tower provides an obvious and convenient "landmark of address".

However, we must remember that the landing site for Life Flight has some definite requirements:

"The site must be 60 feet square and free of rubbish and overhead obstructions."

9 | The On-Duty Nuclear Security Supervisor will:

- \_\_\_ 1. Select an appropriate landing area;
- \_\_\_ 2. Direct Station Security Personnel to mark the landing site; and
- \_\_\_ 3. Arrange a rapid transport of medical personnel to the injury scene.

to ensure -- the safety of the aircraft and its personnel; prompt treatment for the injured; and security control of landing activities.

LANDING SITE

60 foot square, clear of trees, wires, emergency vehicles, trash cans, signs, fallen branches, and snow. (100 foot square needed when high winds are a factor).

Surface should be as smooth as possible with no more than 14 foot difference in elevation from one end of the landing site to the other.

Crowds must be kept back 100 feet from the helicopter at all times.

LANDING SITE MARKINGS

Mark landing site in each corner with smoke bombs (daylight) or flares (night).

X \_\_\_\_\_ X

----- 60 ft. -----

X \_\_\_\_\_ X

WIND DIRECTION

Station one smoke bomb (daylight or flare (night) on the upward side of the landing site to introduce wind direction.

GENERAL SAFETY PRECAUTIONS

1. Approaching Aircraft:

Always approach the aircraft from the front.

Never approach the aircraft until signaled to do so by the pilot.

Never approach aircraft when blades are in motion.

At no time is anyone permitted near the tail of the aircraft.

No smoking within 50 feet of the aircraft.

No running within 50 feet of the aircraft.

Do NOT assist crew members in opening or closing doors of the aircraft.

2. Loading or Unloading:

Flight crew is responsible for loading and unloading equipment.

Flight crew will direct loading and unloading of patient.

When Aircraft Has Landed . . . There should only be three people aboard. The Life Flight Crew consists of - physician, nurse, and pilot.

The Shift Supervisor or his designee shall have an escort, at the landing site, to direct medical personnel to the injured.

If the pilot elects to remain at the aircraft, a Security Officer will stay with him, at all times.

Prior To Departure . . . Security personnel shall make certain that the injured's badge and TLD are NOT on the injured and have been turned over to the Nuclear Security Supervisor. Clear area of take off. Note time of departure and record.

9 |

END

Attachment 2  
Page 5 of 5



DAVIS-BESSE REVISION COVER SHEET

July 20, 1983

DATE

TO: Dir of RRC

FROM: EMERGENCY PLANNING & PREPAREDNESS SUPV.

SUBJECT: Davis-Besse EMERGENCY PLAN SUPPORTING PROCEDURES Manual Changes

This letter transmits additions and revisions to the Davis-Besse

EMERGENCY PLAN SUPPORTING PROCEDURES Manual. Control Copy 50A.

Instructions for the material are as follows:

REMOVE AND RETURN

INSERT

Revision Index, Revision 184

AD 1827.02.9

Revision Index, Revision 185

AD 1927.02.10

Date Revision Entered \_\_\_\_\_

Addressee Signature \_\_\_\_\_

RETURN TO THE OFFICE MANAGER - STOP #3050

4005  
11