

INTER-OFFICE MEMO

PLAINTIFF'S EXHIBIT

BELL-23

August 22, 1989

MEMO TO: All Employees
SUBJECT: PERSONAL PROTECTIVE EQUIPMENT

The safety and health of employees and the prevention of injuries and illnesses are prime objectives of Bell Helicopter management.

Effective September 1st, personal protective equipment will be required in designated areas throughout our facilities. Appropriate floor markings and signs have been installed to define the areas affected.

Several employees have asked questions associated with the requirements of the program. Many of these questions are answered on the pages that follow. We also have included schematics outlining MANDATORY personal protective equipment requirements in each building. Please review this information at your convenience before September 1st.

Should further assistance be required, please contact the Industrial Safety and Hygiene Department at x3977.

Timothy R. Racicot
Timothy R. Racicot
Manager
Industrial Safety/Hygiene

PERSONAL PROTECTIVE EQUIPMENT PROGRAM
EFFECTIVE SEPTEMBER 1, 1989

QUESTIONS AND ANSWERS

- Q. What is the "general purpose of the "yellow dots" placed on the floors in several of our buildings?
- A. These "yellow dots" generally define the outer boundaries (perimeters) of those areas where personal protective equipment is required
- Q. What do the "yellow dots" on the floor of some buildings signify?
- A. Some buildings have aisleways where personal protective equipment is not required. If you are in an aisle that is marked on both sides by "yellow dots," you are NOT REQUIRED to wear personal protective equipment. However, we do RECOMMEND it be worn.
- Q. Some "yellow dots" run across the aisleways, what do they signify?
- A. These "dots" accompanied by a sign hung over the aisleway specifying the protective equipment REQUIRED indicates that you are entering an area where personal protective equipment is required.
- Q. Some signs say "REQUIRED," others say "RECOMMENDED," what is the difference?
- A. "Required" means the specified personal protective equipment on the sign is MANDATORY in the area. "Recommended" means the personal protective equipment on the sign is NOT MANDATORY but recommended when performing operations in the area.
- Q. Signs at some building entrances state the "EYE AND ADEQUATE FOOTWEAR ARE REQUIRED IN THIS AREA;" others state "EYE AND ADEQUATE FOOTWEAR IS REQUIRED IN DESIGNATED AREAS." What's the difference?
- A. Those entrance doors marked "Required" indicate that eye and adequate footwear are MANDATORY when you enter the building through the door. Those marked "required in DESIGNATED AREAS" indicate that there are areas in the building where personal protective equipment is mandatory and must be worn. There are also areas in the building where personal protective equipment is not required. For example, aisleways marked on both sides by yellow dots.

PERSONAL PROTECTIVE EQUIPMENT PROGRAM
EFFECTIVE SEPTEMBER 1, 1989

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- Q. Are visitors and contractors required to wear occupational safety glasses in the areas defined by BHTI management?
- A. Yes. All employees, contractors and visitors shall wear occupational safety glasses at all times in areas defined by BHTI management.
- Q. Are there areas at BHTI where occupational safety glasses are not required?
- A. Occupational safety glasses are not required in office areas, cafeterias, guard gates, locker and washrooms unless otherwise specified. There are also SOME building aisleways where safety glasses are not required.
- Q. Where can I get non-prescription occupational safety glasses?
- A. Non-prescription (plano) occupational safety glasses are available through the Personal Protective Equipment Catalog, a supplement to the BHTI Material Code Catalog. To order, supervision must provide the Material Code Catalog Number, department charge and traffic point (T.P.) when ordering through Dispatching.
- Q. What are the material code numbers for non-prescription (plano) occupational safety glasses?
- A. The material code numbers for non-prescription (plano) safety glasses are as follows:

TYPE	MATERIAL CODE NUMBER
1. UVEX Ultra Spec 2000	5900-63630
2. Standard Safety Glasses UVEX 9142 Topsider	5900-63953
3. Standard Safety Glasses A.O. Aerosite 8500	5900-64102

- Q. Where can I get a copy of the Personal Protective Equipment Catalog?
- A. Copies of the Personal Protective Equipment Catalog are available upon request by contacting the Industrial Safety and Hygiene Department at x5857.
- Q. Who is eligible for prescription occupational safety glasses?
- A. Prescription occupational safety glasses are available to employees required to work in defined eye protection areas on a "regular" basis. Those employees who only "occasionally" enter eye protection area are not eligible.
- Q. How does an employee who wears prescription glasses and is not eligible for prescription occupational safety glasses protect his or her eyes when required to enter a mandatory occupational safety glass area?
- A. The employee is required to wear non-prescription (plano) safety glasses "with" or "without" personal glasses. The UVEX Ultra Spec 2000 available through the Personal Protection Equipment Catalog is designed to be worn over personal eyewear.
- Q. How often may an eligible employee receive prescription occupational safety glasses?

- A. An eligible employee is entitled to receive prescription occupational safety glasses once every 12 months.
- Q. What is the procedure an eligible employee must follow to receive prescription occupational safety glasses?
- A. An employee must submit an AVO signed by their supervisor requesting an occupational safety glass form. The AVO must contain the employee's full name and full clock number. The Industrial Safety and Hygiene Department will verify annual eligibility and issue a safety glass form with a list of participating opticians. The safety glass form and a copy of the employee's current prescription must be presented to the optician on the visit date. The optician will assist with frame selection and measurements. They will order safety glasses and frames and notify the employee when they are received. The employee must return to the optician to receive the glasses and final fitting adjustments. The employee must acknowledge receipt once satisfied with glasses and services rendered.
- Q. Does the prescription occupational safety glass program include payment for an eye examination?
- A. No. The program allows payment for lenses and frames ONLY.
- Q. Is an employee required to select one of the frames and lenses offered as part of the program?
- A. No. But any frame and lenses chosen must meet impact resistant occupational safety glass specifications outlined in the ANSI Z87.1 standard. The employee also bears the full cost of any frame and lenses not offered as part of this program. There is no partial payment.
- Q. How does an employee get side shields to fit prescription occupational safety glass frames?
- A. All employee prescription occupational safety eyewear (frames) manufactured for BHTI employees by Dispensers Optical since December 1, 1988, are equipped with "permanent" or "removable" sideshields.
- Q. How does an employee who is not yet eligible for another pair of prescription occupational safety glasses get sideshields for occupational safety glasses received before December 1, 1988?
- A. Provide the frame type (Titmus, Liberty Optical, American Optical, etc.) to your supervisor. You or your supervisor can obtain sideshields by contacting the Industrial Safety and Hygiene Department and providing the frame type information. Sideshields are also available in First Aid at Plants 5A and 6, and Building 36 at Plant 1.
- Q. Who does an employee contact if there is a problem with his or her prescription occupational safety glasses?
- A. The employee contacts the participating optometrist or optician he or she went to to obtain the prescription occupational safety glasses. The contract with BHTI contains a provision for "problem resolution." If not satisfied with the service, contact the Industrial Safety and Hygiene Department at x2146.

Eye Protection Policy
Page 4

- Q. Are occupational safety glasses required for those who wear contact lenses?
- A. Yes. Contact lenses shall be worn only in conjunction with occupational safety glasses.
- Q. Are there any situations where contact lenses are not to be worn?
- A. Yes. Under no circumstances shall contact lenses be worn with a self contained breathing apparatus (SCBA) respirator in a contaminated environment. In addition, when the work environment entails exposure to chemical fumes, vapors, mists or splashes, intense heat, molten metals or dusty atmospheres, contact lens use may be restricted by the Industrial Safety and Hygiene Department.
- Q. How will occupational safety glasses be provided for visitors?
- A. Visitors will be issued a pair of occupational safety glasses in addition to a badge when they enter a BHTI facility. It is up to the BHTI employee who escorts the visitor to see to it that the eyewear is worn in defined areas and returned with the visitor badge upon leaving BHTI.

FOOT PROTECTION POLICY
EFFECTIVE SEPTEMBER 1, 1989

QUESTIONS AND ANSWERS

- Q. What is the purpose of the foot protection policy at Bell Helicopter?
- A. The purpose is to establish procedures for the prevention of foot injuries and comply with the requirements of federal regulations.
- Q. Does this policy apply to all operations and employees of Bell Helicopter?
- A. Yes.
- Q. What is the definition of "adequate" footwear?
- A. Foot protection designed and worn for protection against foot injury that meets the following criteria:
- * The entire foot shall be enclosed to a point on a line with the top of the arch.
 - * Shoe uppers shall be of leather or a comparable material.
 - * The material shall be of sufficient strength and firmness to minimize potential for injury from a falling object and/or chemical saturation.
 - * Soles shall be of sufficient thickness to prevent penetration of metal particles, and shall be of leather or oil resistant material, i.e., rubber or neoprene.
 - * Height of the heel shall not exceed two inches.
 - * Diameter of the heel shall be at least one inch at the tread surface.
- Q. How does one know where the "adequate" footwear areas are at Bell Helicopter?
- A. These areas are defined by signs and floor markings.
- Q. Are employees required to wear safety shoes in "adequate" foot protection areas?
- A. No. However, an employee may choose to wear safety shoes to meet the requirements.
- Q. How are safety shoes defined?
- A. A shoe with leather uppers which fully encloses the foot below the ankle having a steel or composite toe cap under the leather toe cap. Soles are made of leather or other oil, skid resistant material or sufficient thickness to prevent penetration of metal objects. Heel height does not exceed two inches and has a minimum of one inch of tread surface.
- Q. Where can an employee purchase safety shoes?
- A. A safety shoemobile visits Plant 1 (south gate) and Plant 5 (east gate) on a monthly basis. Visits to other plants are scheduled on a periodic

basis. The dates and times are posted on company bulletin boards in advance of each visit. An employee may purchase shoes from the shoemobile while on site or other safety shoe stores in the metro-plex area.

- Q. Does Bell Helicopter contribute to the purchase of safety shoes to be worn in the manufacturing environment?
- A. No. The total cost of footwear, safety or otherwise, is the responsibility of the employee.
- Q. May an employee purchase safety shoes from the shoemobile and have the purchase price deducted from his/her paycheck?
- A. Yes. An employee may have the cost of a pair of safety shoes from the shoemobile deducted from one or two paychecks by signing a payroll deduction form at the time of purchase.
- Q. Can an employee wear tennis (athletic) shoes to work?
- A. No. Any shoe designed to be worn for leisure or sporting activity is prohibited.
- Q. My tennis (athletic) shoes are leather and more durable than other tennis (athletic) shoes, why can't I wear them to work?
- A. Tennis (athletic) shoes are designed for leisure and sporting activities. In the best interest of employee safety, tennis and athletic shoes are prohibited in the manufacturing environment.
- Q. Are there areas where "adequate" foot protection is not required?
- A. Yes. Adequate footwear is only required in those areas marked by sign or floor marking.
- Q. Who is responsible for ensuring compliance with the requirements of this policy?
- A. Management shall provide adequate supervision and support to ensure compliance with the requirements of this policy. Each employee has the responsibility to comply with the requirements of the policy.
- Q. Who will make interpretations with regard to questions concerning the "adequate" footwear policy?
- A. The Industrial Safety and Hygiene Department will assist all levels of supervision in the interpretation of the requirements of the policy.
- Q. Are outside contractors required to wear "adequate" footwear in required areas?
- A. Yes. Adequate footwear shall be worn by all contractors who enter or work in manufacturing or production related areas as defined by Bell Helicopter Textron management.

- Page 2
- Q Who is responsible for enforcement of this requirement with contractors?
- A The Bell Helicopter person(s) and department who is responsible for monitoring the work or service provided to Bell Helicopter as part of the scope of the contract, i.e., Facilities, Equipment Engineering and Procurement personnel.
- Q What other footwear is considered unsafe and shall not be worn in "adequate" foot protection areas at Bell Helicopter?
- A Footwear such as sandals, open heels, open toe, spiked heels, platform soles and crepe soles are considered unsafe and shall not be worn.

HEARING PROTECTION POLICY
EFFECTIVE SEPTEMBER 1, 1989

QUESTIONS AND ANSWERS

- Q. What is the purpose of the policy?
- A. The purpose of the policy is to assure employee safety, control noise sources and comply with the requirements of federal regulations.
- Q. Who does this policy and procedure apply to?
- A. This procedure applies to all operations and employees of Bell Helicopter Textron.
- Q. How do you determine if an area requires hearing protection?
- A. Noise levels in the area are monitored and evaluated. Areas exceeding acceptable limits are then designated as mandatory hearing protection areas. Those areas whose noise level approaches BUT DOES NOT MEET OR EXCEED acceptable levels are designated as recommended hearing protection areas.
- Q. How are MANDATORY hearing protection areas designated at Bell Helicopter?
- A. Signs and floor markings designate areas where hearing protection is required at all BHTI facilities.
- Q. Is hearing protection MANDATORY in areas marked with signs saying "HEARING PROTECTION RECOMMENDED IN THIS AREA"?
- A. No. However, as stated, we do recommend that hearing protection devices be worn.
- Q. Where does an employee get hearing protection devices?
- A. Area management is responsible for providing hearing protection devices upon an employee's request and assuring that an adequate supply is available in their immediate work area(s).
- Q. Who is responsible for ensuring compliance with the requirements of this policy?
- A. Management shall provide adequate supervision and support to ensure compliance with the requirements of this policy. Each employee has the responsibility to comply with the requirements of the policy.
- Q. How does a supervisor obtain hearing protection devices?
- A. A member of management may requisition hearing protection devices through the Personal Protective Equipment Catalog, a supplement to the BHTI Material Code Catalog.
- Q. What types of hearing protection devices are available through the Personal Protective Equipment Catalog?

A Ear plugs, muffs and head bands (banded plugs) are available through the Personal Protective Equipment Catalog.

Q. What are the material code catalog numbers for each type of hearing protection?

A The material code catalog numbers for each type of available hearing protection devices are as follows:

TYPE	MATERIAL CODE CATALOG NUMBER
1. Ear Plug	5900-63536
2. Head Band with Ear Pods (Plugs)	5900-63913
3. Ear Muff	5900-63541

Q. Can an employee choose any one of the three hearing protection devices for their given area?

A. Yes. However, it is recommended that employees working on the flight line or in close proximity to operating aircraft utilize ear muffs only.

Q. What other information is required when ordering hearing protection devices and other PPE from Material Stores?

A. In addition to the material code catalog number, your individual department charge number and your traffic point is required when you order through Dispatching.

Q. May employees wear their own PERSONAL hearing protection devices?

A. Yes. However, they must be approved by the Industrial Safety and Hygiene Department before they are worn. Otherwise, personal hearing protection devices are NOT authorized.

RESPIRATORY PROTECTION
EFFECTIVE SEPTEMBER 1, 1989

QUESTIONS AND ANSWERS

- Q. What is the purpose of the Respiratory Protection Policy?
- A. The purpose of the Respiratory Protection Policy is to control possible health hazards to employee respiratory systems.
- Q. What is the purpose of the Respiratory Protection Safety and Health Procedure?
- A. This operating procedure establishes the respirator program for use at all Bell Helicopter Textron facilities.
- Q. What is included in the Respiratory Protection Procedure?
- A. The procedure includes requirements for training and fitting, exclusive employee use of respirators, cleaning and disinfecting, storage, inspection and maintenance, work area surveillance program evaluation, medical evaluation and selection of approved respirators, all mandated by federal law.
- Q. What federal law outlines respiratory protection requirements?
- A. Title 29 C.F.R. 1910.134, Respiratory Protection (OSHA).
- Q. What does "OSHA" stand for?
- A. OSHA stands for Occupational Safety and Health Administration.
- Q. Who does this procedure apply to?
- A. This procedure applies to all operations and employees of BHTI.
- Q. What does TLV and PEL stand for?
- A. Threshold Limit Value/Permissible Exposure Limit. The concentration of airborne toxic material to which nearly all workers may be repeatedly exposed day after day, without adverse health effects.
- Q. What does "SCBA" stand for?
- A. SCBA stands for Self Contained Breathing Apparatus.
- Q. What does "PAPR" stand for?
- A. It stands for Powered Air Purifying Respirator.
- Q. Is a "paper mask" considered a respirator?
- A. Yes.
- Q. Do respiratory protection procedures apply to "paper masks" as well?

A Yes.

Q. When must an employee wear respiratory protection?

A Approved respiratory protection shall be worn by employees whenever they are required to work in areas where potential health hazards exist as determined by industrial hygiene monitoring and marked by signs and floor markings. Respiratory protection shall also be worn where operations performed and/or environmental conditions are suspect to be hazardous to an employee's respiratory system as specified by the Industrial Safety and Hygiene Department.

Q. Who should be contacted if there is any doubt as to whether respiratory protection is required?

A. The Industrial Safety and Hygiene Department at x5857.

Q. Who is responsible for ensuring compliance with the requirements of this policy?

A. Management shall provide adequate supervision and support to ensure compliance with the requirements of this policy. Each employee has the responsibility to comply with the requirements of the policy.

Q. What are some factors that must be considered when selecting a respirator to be worn?

- A.
- (1) Physical state(s) and chemical properties of the substance determine if a dust, mist, vapor, gas or combination thereof.
 - (2) Industrial hygiene data on the substance. Consult MSDS to obtain permissible exposure limits. Test area to determine oxygen content.
 - (3) Maximum use concentration. Look at respirator package. Compare protection factor to PEL and known levels in the area.
 - (4) Respirator limitations. Specific requirements may limit or restrict respirator selection for individually regulated contaminants such as asbestos, ammonia, etc.
 - (5) Respirator approval. Respirators must be approved by MSHA/NIOSH and contain the applicable approval number and labels.
 - (6) Warning properties of the contaminant must be considered. Some gases and vapors have different warning properties such as carbon monoxide and may necessitate the use of end-of-service life indicators.
 - (7) High toxicity or carcinogenic potential may invalidate the use of a chemical cartridge or particulate respirators unless there is a specific OSHA standard allowing their use.

Q. What respiratory protection must be provided if there are no appropriate chemical cartridge or particulate respirators available?

A. Supplied air respirators are to be used when there are no chemical cartridge or particulate respirators available.

Q. Are respirators without NIOSH/MSHA approval labels approved for use?

A. No.

Respiratory Protection

Page 3

- Q. Are "approved" respirators considered "unapproved" when any component missing or damaged?
- A. Yes. They shall not be worn until repaired. If they cannot be repaired they shall be disposed of.
- Q. Which respirators are considered to be disposable and/or single use respirators?
- A. With the exception of SCBA, PAPR's and airline respirators, all other respirators in use at BHTI are classified as disposable or maintenance free. These include the "paper" type masks as well as the and North dual cartridge respirators used for plating, painting and solvent mixing. Generally, these respirators are used for a short duration. Following usage, the ENTIRE respirator is disposed of and replaced with a new one. Keep in mind that with the exception on the pre-filters (cloth-like filters), the dual cartridge respirator filters are NOT replaceable, necessitating that the entire respirator be disposed of.
- Q. Can parts from one respirator manufacturer be used to repair another manufacturer's respirator?
- A. No. Respirators that have parts from more than one manufacturer do not meet approval specifications and are therefore "unapproved."
- Q. Where can I get a respirator?
- A. Respirators can be ordered from the Personal Protective Equipment Catalog through Dispatching.
- Q. What information is required by Dispatching when ordering?
- A. The Material Code Catalog Number, department charge number and traffic point (T.P.) is required.
- Q. How do I know which respirator is "approved" for a given operation?
- A. The Personal Protective Equipment Catalog contains a column titled "Application" which spells out typical uses and protection provided by each type of respirator.
- Q. What pages of the Personal Protective Equipment Catalog contain respiratory protection?
- A. Page 5 through 13 of the current Personal Protective Equipment Catalog contains the various types of respiratory protection.
- Q. Are employees required to receive respiratory protection training?
- A. Yes, regardless of the type of respirator they are using and regardless whether they are wearing a respirator in a mandatory or non-mandatory area.
- Q. How does an employee go about getting the required training?

- A. Management personnel must contact the Industrial Safety and Hygiene Department at x5357 to schedule respiratory protection training
- Q. How long does respiratory protection training take?
- A. Each session lasts approximately 45 minutes.
- Q. What is covered in respiratory protection training?
- A. Employees will be instructed how to select a respirator based on the hazard involved and how to properly wear a respirator.
- Q. Is it necessary to have all the respirator straps in place when donning a respirator?
- A. Yes. Employees shall wear respirators with all straps in the proper position and secured.
- Q. Are employees who work in areas where respiratory protection is MANDATORY allowed to wear a respirator with a beard?
- A. No. Respirators require a good face seal to provide the proper protection. Such conditions affecting the face seal may be beards, sideburns, temple bars of glasses, etc.
- Q. May an employee wear a respirator in a NON-MANDATORY respiratory protection area with a beard?
- A. Yes. However, this person must still receive respiratory protection training. The employee will be advised of the protection limitations and be asked to acknowledge such as part of the respiratory protection training process.
- Q. What types of respirators are for the exclusive use of an employee?
- A. Cartridge respirators and single use dust and fume respirators (paper masks) shall be used by individual employees exclusively.
- Q. What types of respiratory protection is not for the exclusive use of a single employee?
- A. Gas masks, supplied air respirators, powered air supply respirators (PAPR's), self contained breathing apparatus (SCBA's), where this equipment is stored for emergency use, is not assigned to individual employees, except during the actual time of usage.
- Q. When is this equipment required to be cleaned?
- A. This equipment shall be cleaned and disinfected before another employee uses it or before the equipment goes into storage.
- Q. Do the single use respirators (paper masks) require cleaning?
- A. No. However, they should be discarded when necessary and be replaced with a clean one.

Respiratory Protection
Page 5

- Q. How is an employee made aware of the respirator cleaning procedure?
- A. Each employee is briefed on the procedure during respiratory protection training.
- Q. What is "generally" required when cleaning a respirator?
- A. Most respirators may be cleaned with warm water and a mild detergent. Clean respirators may be disinfected by wiping the respirator with isopropyl alcohol. The respirators may be returned to service when they are dry. (Refer to Safety and Health Procedure No. 20.)
- Q. How must respirators be stored?
- A. All disposable type respirators, including the "paper" type must be stored in respirator storage bags when not in use (zip lock bags), which are available through the Personal Protective Equipment Catalog.
- Q. May an employee store a respirator in a tool box or locker without a storage bag or carton?
- A. No. Respirators must be stored in a respirator storage bag before being placed in a tool box or locker.
- Q. Who is responsible for the appropriate surveillance of work area conditions and degree of employee exposure?
- A. The Industrial Safety and Hygiene Department (x5857).
- Q. Is the physical capability of an employee considered before being REQUIRED to wear a respirator?
- A. Yes. Employees shall not be assigned tasks where respiratory protection is required unless it has been determined by the Manager of Medical Services, that they are physically able to perform the work and use the equipment.

SUBJECT SAFETY PROGRAM		DATE 11-3-76	NUMBER 63	M D
		SUPERSEDES -	PAGE OF 1 14	
ISSUED BY: INFORMATION SYSTEMS	PREPARED BY: R.F.H.	APPROVED BY: <i>[Signature]</i>		

- A. Bell Helicopter Textron (BHT) has as a primary objective the protection of its employees and property from safety hazards. BHT's Safety Programs, in both Product/Flight Safety and Industrial Safety will be given the highest priority by management.
- B. BHT must maintain a strong Safety discipline and require each employee to be alert to Safety hazards and to strictly comply with established Safety procedures and practices.
- C. Bell's Safety Program is structured into the two broad categories of Product/Flight Safety and Industrial Safety. Product/Flight Safety encompasses Flight Operations Safety; Systems Design Safety; Armament Safety; the Product Safety Board; and Accident Investigation. Industrial Safety is comprised of Occupational Safety and Health, and Fire Prevention and Protection. Together, these activities form the overall Safety Program for Bell. To ensure the success of this Safety Program, each member of management will provide full support and promote safety within their respective areas of responsibility.
- D. Separate committees dealing with various aspects of the Safety Program will be established to oversee and provide direction for the effective implementation and operation of the overall program.
- E. Specific requirements of the total BHT Safety Program must be documented to permit an understanding of the safety performance required, to establish a basis for program review and evaluation, and to provide a means for monitoring performance and compliance.

A. PRODUCT/FLIGHT SAFETY

- BHT 01028

MANAGEMENT DIRECTIVE BELL HELICOPTER COMPANY	DATE 11-3-76	INSTRUCTION NO. 63	
	SUPERSEDES -	PAGE 2	OF 4

2. The Chief of Flight Safety will conduct necessary reviews and audits to determine compliance with BHT established procedures. He will issue a quarterly Safety performance report to the Vice President Research and Engineering, and the President. The report will include:
 - a. The results of the Safety program for the past quarter.
 - b. Any major deficiencies in the conduct of BHT's Safety Program.
 - c. Significant safety recommendations and changes for incorporation.
3. The Chief of Flight Safety is responsible for the preparation and maintenance of the Flight Operating Procedures Manual and will coordinate the following functions to assure appropriate interfacing of Safety communications and actions.

FLIGHT OPERATIONS SAFETY - Encompasses the operational functions of Flight Safety to assure adequate Pilot training and standardization, Pilot qualifications and records, and flight operating procedures.

SYSTEM DESIGN SAFETY - The application of engineering design principles to assure incorporation of design features to promote fail safe design, to assure crash worthiness and to prevent or control hazards within a given system.

ARMAMENT SAFETY - The review and coordination of armament design, installation, firing, and explosive handling criteria procedures.

PRODUCT SAFETY BOARD - A committee established to monitor the operations of BHT products to assure the highest possible level of product safety and to provide necessary safety changes and improvements to BHT products for reliability purposes.

ACCIDENT INVESTIGATION - Includes a pre-accident investigation plan and its application to determine cause and insure corrective action. This plan is described in an Aircraft Emergency SPL.

B. INDUSTRIAL SAFETY

1. Both the Occupational Safety and Health and the Fire Prevention and Protection categories of Bell's Industrial Safety Program will be administered at staff level under the direction of the Vice President of Industrial Relations.

MANAGEMENT DIRECTIVE BELL HELICOPTER COMPANY	DATE 11-3-76	INSTRUCTION NO. 63	
	SUPERSEDES -	PAGE 3	OF 4

2. The Chief of Industrial Safety and the Fire Chief will be required to conduct necessary reviews and audits to determine compliance with BHT established procedures in their respective areas of responsibility. They will issue quarterly safety performance reports to the Vice President of Industrial Relations and the President. Each respective report will include:
 - a. The results of their respective programs for the past quarter.
 - b. Any major deficiencies in the conduct of each program.
 - c. Significant safety recommendations and changes for incorporation in each program.

3. Occupational Safety and Health

The Chief of Industrial Safety is assigned the responsibility for occupational safety and health for all operations and facilities of BHT. The Chief of Industrial Safety will publish and maintain the Fire and Accident Prevention Standards (FAPS) Manual covering Industrial Safety at all BHT Facilities. The FAPS Manual establishes the safety criteria, standards, and procedures that are to be observed by all functional organizations.

4. Fire Prevention and Protection

The Fire Chief is responsible for providing active fire prevention programs and for maintaining fire protection equipment and trained personnel to minimize loss due to fire.

C. ALL DEPARTMENTS

Each Department is responsible for:

1. Promoting and sustaining BHT Safety interest and instilling a safety awareness in all employees.
2. Insuring that departmental training programs provide significant emphasis on Safety and that Department Instructions which implement FAPS or other safety standards are coordinated with the appropriate Safety function to provide an integrated, unified accident prevention program.

MANAGEMENT DIRECTIVE BELL HELICOPTER COMPANY	DATE 11-3-76	INSTRUCTION NO 63	
	SUPERSEDES -	PAGE 4	OF 4

3. The enforcement of Safety standards and encouraging personnel to report any degradation of Safety to Supervision.
4. Taking immediate action to correct safety deficiencies.
5. Designating a Safety Representative having an understanding of safe working practices to represent their organization in Company safety matters.

IV ~~III~~

SAFETY PROCEDURES

Instructions covering safety at Bell are contained in Management Directives, Standard Practice Instructions and other Procedures Manuals. These documents define the requirements and responsibilities for the overall safety program at Bell. MD's, SPI's, and other procedure manuals directly applicable to Safety are listed in the attachment to this MD.

BHT SAFETY PROCEDURES

This MD and the following MD's, SPI's and Manuals contain Company policy and inter-departmental procedures covering Bell's Safety Program:

A. MANAGEMENT DIRECTIVES

MD 16	Occupancy During Production Flight Test - Commercial Helicopters
MD 46	Product Safety Board
MD 51	Pilot Proficiency Requirements

B. STANDARD PRACTICE INSTRUCTIONS

SPI 10.213	Care of Company Owned and/or Company Operated Aircraft
SPI 10.216	Incorporation of Product Safety Board Requirements
~ SPI 12.200	Aircraft Emergency, Forced Landing or Crash
SPI 12.203	Industrial Defense and Disaster Control
SPI 12.204	Fire Prevention and Protection
SPI 19.205	Industrial Safety Program
SPI 19.208	First Aid
SPI 28.200	Airport Operations Regulations
SPI 67.201	Fueling and Defueling
SPI 81.207	Radio Communications
SPI 86.200	Severe Weather Procedure
SPI 86.201	Flight Operating Procedures

C. MANUALS

Flight Operating Procedures Manual - Department 86 Instructions governing Bell flight operations.

Fire and Accident Prevention Standards Manual - Procedures implementing Bell's Industrial Safety Program.

MANAGEMENT DIRECTIVE

Bell Helicopter **TEXTRON**

M D	SUBJECT	
	SAFETY PROGRAM	
	PREPARED BY	APPROVED BY
	E. D'Acosta	

NUMBER 8-1C
DATE 12-17-85
SUPERSEDES 8-1B
PAGE 1 OF 5

I. POLICY

- A. One of the primary objectives of Bell Helicopter Textron Incorporated (BHTI) is the protection of its employees and property. BHTI's Safety Program, in both Product Safety and Industrial Safety, will be given the highest priority by Management.
- B. The Company must maintain a strong safety awareness. Each employee shall be alert to safety hazards and strictly comply with established safety procedures including the prompt reporting of accidents, incidents, and mishaps.
- C. BHTI's Safety Program coordinates two broad categories of Product Safety and Industrial Safety. Product Safety encompasses Flight Operations Safety, Systems Safety, Laser Safety, Armament Safety, Foreign Object Damage (FOD) Prevention, the Product Safety Board, and Aircraft Mishap Investigation. Industrial Safety is comprised of Occupational Safety and Hygiene, and Fire Prevention and Protection. Together, these activities form the basic Safety Program for BHTI. To ensure the success of this Safety Program, each member of Management will provide full support and promote safety within their respective areas of responsibility.
- D. Committees dealing with various aspects of the Safety Program are established to oversee and provide direction for the effective implementation and operation of the overall program.
- E. Specific requirements of the total BHTI Safety Program are documented to permit an understanding of the safety performance required, to establish a basis for program review and evaluation, and to provide a means for monitoring performance and compliance.

II. RESPONSIBILITIES

A. PRODUCT SAFETY

- 1. The Product Safety Program is administered at Staff Management level under the direction of the Senior

BHT 01033

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER	
	12-17-85	8-1C	
	SUPERSEDES	PAGE	OF
	8-1B	2	5

Vice President, Research and Engineering. The Director, Safety and Certification is assigned responsibility for Flight/System Safety for all BHTI operations and facilities including offsite operations. The Director, Safety and Certification organizes and administers an aggressive accident prevention program to include, but not be limited to, the following safety functions and activities necessary to predict and control product hazards:

FLIGHT OPERATIONS SAFETY - Encompasses the operational functions of flight safety to ensure adequate pilot training and standardization, to monitor pilot qualifications and records, and to coordinate, review, and update flight operating procedures. (See MD 8-9).

SYSTEM SAFETY - Involves the application of engineering design principles to ensure early incorporation of design concepts to provide inherent safety features, to promote fail-safe design, to ensure crash worthiness, to monitor aircraft safety characteristics and develop trends, and to prevent or control hazards within a given system.

LASER SAFETY - Consists of the safe design, movement, operation, testing, maintenance of lasers/laser systems, and the BHTI registration or licensing according to local jurisdiction.

ARMAMENT SAFETY - Encompasses the procedures for armament design, installation, firing, and explosive handling criteria.

FOREIGN OBJECT DAMAGE PREVENTION - Provides the direction and responsibility for FOD prevention and applies preventive measures to all facets - research, design, development and manufacture - of Bell's products. (See MD 8-14).

PRODUCT SAFETY BOARD - A committee established to monitor the operations of BHTI products to ensure the highest possible level of product safety and to expedite necessary safety changes and improvements to BHTI products for reliability purposes. (See MD 8-3 and SPI 806).

AIRCRAFT MISHAP INVESTIGATION - Includes an accident investigation plan and its application to determine cause and ensure corrective action. This plan is described in MD 8-10 and SPI 805.

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER	
	12-17-85	8-1C	
	SUPERSEDES	PAGE	OF
	8-1B	3	5

2. The Director, Safety and Certification conducts periodic safety surveys and Staff assisted visits to assess the effectiveness of BHTI applicable procedures. The Director will issue a quarterly safety activity report to the Senior Vice President, Research and Engineering and the President.

B. INDUSTRIAL SAFETY

1. The Industrial Safety Program is administered at department level under direction of the Vice President, Human Resources. The Manager, Industrial Safety/Hygiene is assigned responsibility to organize and administer Industrial Safety programs to reduce occupational injuries, diseases, and illnesses, at all BHTI facilities. These programs include, but are not limited to, the following activities:

OCCUPATIONAL SAFETY - Involves the application and development of industrial safety standards, job hazard analyses, and their effects to eliminate or reduce safety hazards. This includes employee educational programs designed to stimulate active participation in the reduction of safety hazards. (See SPI 803).

INDUSTRIAL HYGIENE - To protect the worker and the environment by encompassing environmental health programs that recognize, evaluate, and control physical, chemical, biological, as well as man and machine stresses.

2. The Vice President, Human Resources also assigns responsibility to the Manager, Fire Protection to organize and administer Industrial Safety Programs directed to the protection of the Company's employees and property. These programs include, but are not limited to, the following activities:

FIRE PREVENTION AND PROTECTION - Involves fire prevention inspections, specifications, and employee training to avoid the inception of fire. Fire protection relates to the detection, equipment, and extinguishment of fire to safeguard human life and preserve property. (See SPI 802).

FIRE AND ACCIDENT PREVENTION STANDARDS (FAPS) - A manual covering Industrial Safety at all BHTI facilities. The FAPS Manual establishes the safety criteria, standards, and procedures that must be observed by all functional organizations.

BHT 01035

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER	
	12-17-85	8-1C	
	SUPERSEDES	PAGE	OF
	8-1B	4	5

3. The Manager, Industrial Safety/Hygiene and the Manager, Fire Protection must conduct necessary reviews and audits to determine compliance with BHTI established procedures. Each of these Managers will issue quarterly safety performance reports encompassing their respective areas of responsibility to the Vice President, Human Resources and the President. Each report will include:

- a. The results of respective programs for the past quarter.
- b. Any major deficiencies in the conduct of each program.
- c. Significant safety recommendations and changes for incorporation into each program.

C. ALL DEPARTMENTS

Each department is responsible for:

1. Promoting and sustaining BHTI safety interest and instilling a safety awareness in all employees.
2. Establishing and maintaining particular awareness of foreign object/foreign object damage potential in all areas involving BHTI products.
3. Ensuring that departmental training programs provide significant emphasis on safety and that Department Instructions which implement FAPS, FOD prevention or other safety standards are coordinated with the appropriate safety function to provide an integrated, unified accident prevention program.
4. Enforcing the safety standards and encouraging personnel to report any degradation of safety to Supervision.
5. Taking immediate action to correct safety deficiencies.
6. Designating a Safety Representative who has proper understanding of safe working practices to represent their organization in Company safety matters.
7. Ensuring that accidents/incidents/mishaps are reported promptly.

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER	
	12-17-85	8-1C	
	SUPERSEDES	PAGE	OF
	8-1B	5	5

III. SAFETY PROCEDURES

Instructions covering safety at BHTI are contained in Management Directives, Standard Practice Instructions, and other Procedures Manuals. These documents define the requirements and responsibilities for the overall safety program at BHTI. MD's, SPI's, and other procedure manuals directly applicable to Safety are listed in the attachment to this MD.

BHT 01037

BHTI SAFETY PROCEDURE

This MD and the documents listed below contain Company policy and inter-departmental procedures covering BHTI's Safety Program:

A. MANAGEMENT DIRECTIVES

MD 8-3, Product Safety Board
MD 8-4, Pilot Proficiency Requirements
MD 8-6, Industrial Defense and Disaster Control
MD 8-7, Aircraft Occupancy - Commercial Test Flights
MD 8-8, Emergency Locator Transmitter
MD 8-9, Flight Operating Procedures
MD 8-10, Aircraft Mishap Investigations
MD 8-14, Foreign Object Damage (FOD) Prevention

B. STANDARD PRACTICE INSTRUCTIONS

SPI 204, First Aid
SPI 608, Radio Communications
SPI 716, Company Owned/Operated Aircraft
SPI 802, Fire Prevention and Protection
SPI 803, Industrial Safety Program
SPI 804, Severe Weather Procedure
SPI 805, Aircraft Mishap Investigations
SPI 806, Processing Product Safety Board Requirements
SPI 807, Aircraft Emergencies
SPI 808, Airport Operations Regulations
SPI 809, Aircraft Fuel Handling
SPI 813, Aircraft Mishap Reporting

C. MANUALS

Flight Operating Procedures Manual - Instructions governing BHTI flight operations.

Fire and Accident Prevention Standards Manual - Procedures implementing BHTI's Industrial Safety Program.

Laser Safety Manual - Procedures implementing BHTI's Laser Safety Program.

Foreign Object Damage Prevention Program Document - Quality Program Document (QPD 102) providing direction and responsibility for FOD prevention.

MANAGEMENT DIRECTIVE

Bell Helicopter **TEXTRON**

M D	SUBJECT SAFETY PROGRAM	
	PREPARED BY B. Harbort	APPROVED BY 

NUMBER 8-1D
DATE 9-01-90
SUPERSEDES 8-1C
PAGE 1 OF 6

I. POLICY

- A. It is the policy of Bell Helicopter Textron Incorporated (BHTI) to have among its primary objectives the health and safety of its employees and protection of its property. All aspects of BHTI's Safety Program are given the highest priority by Management.
- B. It is Company policy to actively maintain strong safety awareness in all aspects of our production and support efforts. Each employee complies with the established safety policies and procedures and is held accountable to function in accordance with established safety procedures.

II. GENERAL

- A. BHTI's Safety Program encompasses three broad categories, i.e., Product Safety, Industrial Safety & Hygiene, and Fire Protection/Loss Prevention. Product Safety consists of Flight Operations Safety, System Safety, Laser Safety, Armament Safety, Foreign Object Damage (FOD) Prevention, Product Safety, and Aircraft Mishap Investigation. The Industrial Safety & Hygiene Department, and the Fire Protection Department address issues relating to employee safety, property protection and loss prevention.
- B. Committees dealing with various aspects of safety are established to oversee and provide direction for effective implementation and operation of the overall safety program.
- C. Specific requirements of BHTI's Safety Program are documented to permit an understanding of the safety performance required, to establish a basis for program review and evaluation, and to provide a means for monitoring performance and compliance.

II. RESPONSIBILITIES

A. PRODUCT SAFETY

- 1. The Product Safety Program is administered at the Staff level under the direction of the Sr. Vice President, Research and Engineering.

BHT 01039

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER
	9-01-90 SUPERSEDES 8-1C	8-1D PAGE 2 OF 6

2. The Director, Safety and Certification is responsible for Flight/System Safety for all BHTI operations and facilities including offsite operations. The Director, Safety and Certification organizes and administers an aggressive accident prevention program to include, but not limited to, the following safety program elements/functions and activities necessary to reduce risks:

FLIGHT OPERATIONS SAFETY - Monitors the operational functions of flight safety to ensure adequate pilot training and standardization, to monitor pilot qualifications and records, and to coordinate flight operating procedures.

SYSTEM SAFETY - Involves the application of engineering design principles to ensure early incorporation of design concepts to provide inherent safety features, to promote fail-safe design, to improve crashworthiness, to monitor aircraft safety characteristics, identify trends, and to reduce risks.

LASER SAFETY - Consists of the safe design, movement operation, testing, maintenance of lasers/laser systems, and the BHTI registration or licensing according to local jurisdiction.

ARMAMENT SAFETY - Encompasses the procedures for armament design, installation, firing, and explosive handling criteria.

PRODUCT SAFETY BOARD - Serves as a member of a committee established to monitor the operations of BHTI products to ensure the highest possible level of product safety and to expedite necessary safety changes and improvements to BHTI products.

CONSOLIDATED SAFETY COUNCIL - Chairs a committee composed of decision making representatives to evaluate the overall effectiveness of the accident prevention program and coordinate program elements which are not specifically assigned.

AIRCRAFT MISHAP INVESTIGATION - Includes an accident investigation plan and its application to determine cause and ensure corrective action.

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE 9-01-90	NUMBER 8-1D
	SUPERSEDES 8-1C	PAGE 3 OF 6

3. The FOD Prevention Program is administered by the Product Assurance Department. The Director, Product Assurance is designated as the FOD Prevention Program focal point. The Director or his designee assure that plans and programs designed to prevent FOD are in effect throughout design, development, manufacture, test and delivery phases. Additionally, the Director or his designee is responsible for conducting semi-annual evaluations of the program and for reviewing/analyzing Critical FO/Critical FOD incidents and to assure its continued compliance and adequacy.

B. FLIGHT OPERATIONS SAFETY

1. The Director, Safety and Certification is responsible for establishing and maintaining safe flight operations at all BHTI flight facilities.
2. The Chief Pilot prepares, issues and maintains a Flight Operating Procedures manual covering general requirements of civil and military Air Regulations.
 - a. The manual defines the requirements applicable to flying Company products and the perpetual maintenance of flight records, licenses, and the training of employees engaged in flight activities for BHTI.
 - b. The manual serves as a guide and provides direction for those pilots and, as applicable, non-pilot rated personnel, in departments other than the Flight Test Department.

C. INDUSTRIAL SAFETY AND HYGIENE

1. The Industrial Safety and Hygiene Program is administered at the Staff level under the direction of the Vice President, Human Resources.
2. The Manager, Industrial Safety & Hygiene is responsible to provide direction and consultation Company-wide in establishing and managing a health and safety program in compliance with Federal, State and Local regulations to minimize occupational injuries and illnesses at all BHTI operations and facilities, including offsite operations. This program includes, but is not limited to the following:

BHT 01041

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE	NUMBER
	9-01-90	8-1D
	SUPERSEDES	PAGE OF
	8-1C	4 6

OCCUPATIONAL SAFETY - Development of policies and procedures to minimize unsafe acts and conditions. This includes education and training, safety and housekeeping inspections, job safety analyses, safety promotion, accident investigation and reporting, identification of appropriate personal protective equipment, regulatory compliance, facility design and layout, and safety committees.

INDUSTRIAL HYGIENE - Development and implementation of an occupational health program that anticipates, recognizes, evaluates and controls physical, chemical, biological, man and machine stresses. This includes monitoring for airborne contaminants and noise, as well as identifying means of worker protection to minimize exposures.

RADIATION SAFETY - Encompasses procedures for the safe operation of radiation generating equipment and the handling of radioactive isotopes. Involves the application of engineering design principles to ensure compliance with applicable Federal, State, and Loca' regulations that assure the effective control o employee exposure to radiation.

D. FIRE PROTECTION

1. The Fire Protection Program is administered at the Staff level under the direction of the Vice President, Human Resources.
2. The Manager, Fire Protection is responsible to develop and implement fire protection and loss prevention in compliance with federal, state and local regulations to minimize risk to BHTI employees and property at all BHTI operations and facilities, including offsite operations. This program includes, but is not limited to, the following:

EMERGENCY COORDINATION - Development and implementation of procedures and actions to comply with Federal RCRA and SARA Title III regulations in the event of fire, explosion, or hazardous material spills occurring throughout BHTI.

FIRE PREVENTION AND PROTECTION - Development of specifications and implementation of training and inspections to prevent fire inception. This also include availability of equipment, detection and extinguishment of fire to preserve life and property.

BHT 01042

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE 9-01-90	NUMBER 8-1D
	SUPERSEDES 8-1C	PAGE 5 OF 6

FIRE PREVENTION STANDARDS - Development and maintenance of the Fire Prevention Standards (FPS) manual which establishes the prevention standards and procedures to be observed by all BHTI organizations.

E. SAFETY SURVEY

1. The Director, Safety and Certification, the Manager, Industrial Safety & Hygiene, the Manager, Fire Protection and the Manager, Facilities or their designated representative conduct formal consolidated safety surveys at each BHTI facility on an annual basis. These surveys evaluate compliance with respect to Company procedures and applicable Federal, State and Local regulations.
2. Results of the surveys are reported in writing to the President, Sr. Vice President, Manufacturing Operations, Sr. Vice President, Research and Engineering and Vice President, Human Resources. Each report includes:
 - a. Program accomplishments since the prior report.
 - b. Major deficiencies encountered that require corrective action.
 - c. Recommendations to enhance the Safety Program.

F. ALL DEPARTMENTS

Each department is responsible for:

1. Taking immediate action to correct unsafe acts or conditions.
2. Prompt and thorough reporting of accidents/incidents/mishaps.
3. Promoting and perpetuating BHTI safety interest and instilling a safety awareness in all employees as part of the overall production effort.
4. Compliance with Company procedures on safety program standards.
5. Ensuring that Department Instructions which implement safety program standards are coordinated with the appropriate safety function to provide an integrated, unified accident prevention program.

BHT 01043

MANAGEMENT DIRECTIVE Bell Helicopter TEXTRON	DATE 9-01-90	NUMBER 8-1D	
	SUPERSEDES 8-1C	PAGE 6	OF 6

6. Ensuring that departmental training programs emphasize safety and establish awareness to foreign object/foreign object damage potential in all areas involving BHTI products.
7. Designating a Safety Representative to serve as a liaison with the respective safety functions to administer the Safety Program, and to conduct safety inspections in their respective area on at least a monthly basis.

III. SAFETY PROCEDURES

Documentation covering BHTI's Safety Program is contained in Management Directives, Standard Practice Instructions, and other Procedures Manuals which define the requirements and responsibilities for safety.

MD's, SPI's, and other procedure manuals directly applicable to safety are listed in the attachment to this MD.

BHTI SAFETY PROCEDURE

This MD and the documents listed below contain Company policy and inter-departmental procedures for BHTI's Safety Program:

A. MANAGEMENT DIRECTIVES

MD 8-3, Product Safety Board
MD 8-4, Pilot Proficiency Requirements
MD 8-6, Industrial Defense and Disaster Control
MD 8-7, Aircraft Occupancy - Commercial Test Flights
MD 8-8, Emergency Locator Transmitter
MD 8-9, Flight Operating Procedures
MD 8-10, Aircraft Mishap Investigations
MD 8-11, Environmental Management
MD 8-13, Aircraft Emergency Plan
MD 8-14, Foreign Object Damage (FOD) Prevention
MD 8-15, Consolidated Safety Council

B. STANDARD PRACTICE INSTRUCTIONS

SPI 204, First Aid
SPI 608, Radio Communications
SPI 716, Maintaining Company Owned/Operated Aircraft
SPI 802, Fire Prevention and Protection
SPI 803, Industrial Safety & Hygiene Program
SPI 804, Severe Weather Procedure
SPI 805, Aircraft Mishap Investigations
SPI 806, Processing Product Safety Board Requirements
SPI 808, Airport Operations Regulations
SPI 809, Aircraft Fuel Handling
SPI 810, Government Furnished Munitions
SPI 811, Hazardous Waste Management
SPI 813, Aircraft Mishap Reporting
SPI 814, Control of Commercial Ordnance

C. MANUALS

AIRCRAFT EMERGENCY (PRE-ACCIDENT) PLAN - Report no. 299-959-001, directs specific actions by organizational function.

Fire and Accident Prevention Standards Manual - Procedures implementing BHTI's Safety Program.

Flight Operating Procedures Manual - Instructions governing BHTI flight operations.

Foreign Object Damage Prevention Program Document - Quality Program Document (QPD 102) providing direction and responsibility for FOD prevention.

Industrial Safety & Hygiene Manual - Policies and Procedures implementing BHTI's Safety Program.

Laser Safety Manual - Procedures implementing BHTI's Laser Safety Program.

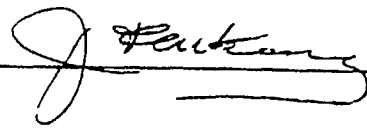
D. OTHER DOCUMENTS

AFR 55-22
AR 95-20
FAR 61-57
NAVAIR INST 3710.1
MIL STD 980

STANDARD PRACTICE INSTRUCTION



BELL HELICOPTER COMPANY

SUBJECT INDUSTRIAL SAFETY PROGRAM		DATE 10-29-76	NUMBER 19.205.4	S P I
		SUPERSEDES 19.205.3	PAGE 1 OF 5	
ISSUED BY: INFORMATION SYSTEMS	PREPARED BY: R.F.H.	APPROVED BY: 		

I. INTRODUCTION

In accordance with sound industrial practices, Bell Helicopter Textron (BHT) will establish and maintain a continuing Industrial Safety Program aimed at the prevention of incidents which may cause employee injury, illness, or disease, or incur damage to material resources.

II. GENERAL

- A. This Standard Practice Instruction outlines requirements and establishes responsibilities for the development, implementation, and compliance with such programs, procedures and practices as are necessary to prevent accidents and provide proper safety, health and sanitary conditions and devices in all facilities owned or operated by the Company.
- B. An effective Industrial Safety Program requires the coordination and integration of all departments' safety and health efforts. The program must also meet current Company needs and standards and those established by the Occupational Safety and Health Administrations of the Federal, State, and Local governments.
- C. The Safety Engineering Section of the Industrial Security Department has the overall responsibility for administering and coordinating the Industrial Safety Program in accordance with the applicable government standards and the provisions of this S.P.I.
- D. The Safety Engineering Section is responsible for issuing and maintaining the Fire and Accident Prevention Standards (FAPS) Manual, which contains instructions covering the application of Occupational Safety and Health Standards for use by all departments.
- E. The Safety Engineering Section monitors the Safety effort at BHT facilities, such as Amarillo, Van Nuys, and others; and when requested, acts in a Safety advisory capacity to Bell affiliates.

STANDARD PRACTICE INSTRUCTION BELL HELICOPTER COMPANY	DATE 10-29-76	INSTRUCTION NO. 19.205.4	
	SUPERSEDES 19.205.3	PAGE 2	OF 5

III. PROCEDURE

A. INDUSTRIAL SAFETY COMMITTEE

1. An Industrial Safety Committee is established to monitor and guide the Industrial Safety Program. The committee consists of:

Vice President, Industrial Relations - Chairman
Director of Industrial Relations
Vice President, Operations
Director of Product Assurance
Chief of Medical Services
Director of Facilities
Manager of Industrial Security
Chief Safety Engineer - Secretary

2. The committee will meet quarterly and at the call of the chairman to:
 - a. Review the Industrial Safety Program.
 - b. Provide guidance on corrective measures for combatting accident trends as recommended by the Chief Safety Engineer.
 - c. Provide guidance for maintaining and increasing interest in the Industrial Safety Program.

B. SAFETY ENGINEERING SECTION

Functions as a service unit to each department at all plants of BHT. As such, they will provide professional safety and health engineering capabilities and technical advice on safety and occupational health hazards and methods of controlling them. Specific responsibilities are:

1. Develop, establish, promote, and administer the BHT Industrial Safety Program at all plants.
2. Prepare and issue Fire and Accident Prevention Standards (FAPS) for inclusion in the manual.
3. Provide technical safety and health advisory services to top management, staff, and operating employees.

STANDARD PRACTICE INSTRUCTION BELL HELICOPTER COMPANY	DATE 10-29-76	INSTRUCTION NO. 19.205.4	
	SUPERSEDES 19.205.3	PAGE 3	OF 5

4. Working with Plant Engineering, design protective equipment or safety devices for use on machines and plant equipment, and when necessary redesign the equipment to eliminate safety and health hazards.
5. Analyze standards, in terms of engineering concepts on which they are based, and apply these standards to meet specific situations.
6. Administer and conduct safety and health surveys at all plants on a scheduled basis with a minimum of once per week. Initiate corrective or preventive measures when required.
7. Secure and arrange to distribute posters, signs, and various communications pertaining to safety and health.
8. Conduct safety and health courses for supervisors and safety and health orientation lectures for all new employees.
9. Assist supervisors in the investigation of safety and health complaints, accidents involving personal injury, and property damage.
10. Recommend and arrange for the purchase of all items of personal safety and health equipment for the protection of employees.
11. Maintain records of occupational accidents and injuries in order to compile reports for submittal to management. Prepare and submit reports of industrial accidents and occupational illnesses and diseases as required by law and by the insurance carrier.
12. Maintain liaison with the Government Safety Officer at BHT and with federal, state, city and county safety and health officials.
13. Determine conformity to applicable standards of:
 - a. The Department of Defense
 - b. The U.S. Department of Labor
 - c. The Walsh-Healy Act
 - d. State, city and local safety and health codes and ordinances.

STANDARD PRACTICE INSTRUCTION BELL HELICOPTER COMPANY	DATE 10-29-76	INSTRUCTION NO. 19.205.4	
	SUPERSEDES 19.205.3	PAGE 4	OF 5

14. Review plant modification and construction plans and specifications from Plant Engineering to determine if safety and health considerations are included or involved.
15. Dispense prescription safety glasses to those employees requiring glasses and whose work demands eye protection.
16. Monitor the program of inspection and load testing of hoists and cranes as established and performed by Plant Maintenance.
17. Authorize the shutdown of machines or equipment on which hazardous conditions exist by attaching a red tag. The red tag will remain on the machine until the situation is corrected to the satisfaction of the Safety Engineer.

C. ALL DEPARTMENTS

1. When issuing Departmental Instructions which supplement FAPS, coordinate such instructions through the Safety Engineering Section prior to their issuance.
2. Emphasize the compliance by all employees with FAPS and other basic rules of Safety in performing their job assignments.

D. SUPERVISORS

Supervisors have the inherent responsibility for taking the necessary action to eliminate or reduce accidents, to provide for the safety and health of personnel, and to protect equipment under their jurisdiction. This includes:

1. Making certain that applicable safety and health features are incorporated in machinery and equipment or other property being acquired, modified, and/or used within their area of responsibility.
2. The preparation and issuance of any internal directives and instructions that are necessary to implement established safety and health programs and procedures.
3. The utilization of applicable devices and services which are available through the Safety Engineering Section.
4. Reporting to responsible supervision and the Safety Office, any discovery of conditions which could be detrimental to the safety and/or health of employees.

STANDARD PRACTICE INSTRUCTION BELL HELICOPTER COMPANY	DATE 10-29-76	INSTRUCTION NO. 19.205.4	
	SUPERSEDES 19.205.3	PAGE 5	OF 5

E. EMPLOYEES

Each employee is responsible for the observance of the basic rules of safety, hygiene and accident prevention in accordance with the standards established by the Company and Federal, State, and Local agencies. This includes:

1. Utilizing personal safety devices and other protective equipment provided by the Company .
2. Complying with all safety and health, sanitation, and fire regulations, procedures and practices.
3. Promptly reporting any hazardous conditions or other safety and health deficiencies to their supervision.

F. FACILITIES

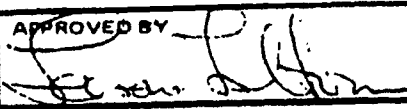
1. Plant Maintenance will cooperate with Safety Engineering to the fullest possible extent by giving highest priority to correcting hazardous conditions when detected and reported.
2. In conjunction with Safety Engineering and Equipment Engineering, Plant Engineering will design safety guards and/or devices for use on plant equipment and machinery.
3. Plant Maintenance will establish and perform a scheduled program of inspection and load testing of all hoists and cranes used at all plants of BHT in accordance with Department of Labor standards.
4. Plant Engineering will coordinate modification and construction plans and specifications through the Chief Safety Engineer for compliance.

G. TOOL CRIBS

Issue items of personal safety equipment, other than prescription glasses, to those employees who require them.

STANDARD PRACTICE INSTRUCTION

Bell Helicopter **TEXTRON**

S P I	SUBJECT	
	INDUSTRIAL SAFETY PROGRAM	
	PREPARED BY	APPROVED BY
	E. E. D'Acosta	

NUMBER 803A
DATE 12-19-84
SUPERSEDES 803
PAGE 1 OF 6

I. INTRODUCTION

In accordance with sound industrial practices, Bell Helicopter Textron Inc. (BHTI) maintains a continuing Industrial Safety Program aimed at the prevention of incidents which may cause employee injury, illness, or disease, or cause damage to material resources. This SPI outlines requirements and establishes responsibilities for the development, implementation, and compliance with such programs, procedures, and practices as are necessary to prevent accidents and fires, and provide proper safety and health conditions and devices in all facilities owned or operated by the Company.

II. REFERENCES

SPI 802, Fire Prevention and Protection

III. GENERAL

- A. An effective Industrial Safety Program requires the coordination and integration of all departments' safety, health and fire prevention efforts. The program must also meet current Company needs and standards and those established by the Federal Occupational Safety and Health Administration and state and local governments.
- B. The Industrial Safety/Hygiene and Fire Protection Department has the overall responsibility for administering and coordinating the Industrial Safety Program in accordance with the applicable government standards and the provisions of this SPI.
- C. The Industrial Safety/Hygiene and Fire Protection Department is responsible for issuing and maintaining the Fire and Accident Prevention Standards (FAPS) Manual, which contains instructions covering the application of occupational safety, health and fire prevention standards for use by all departments.
- D. The Industrial Safety/Hygiene and Fire Protection Department monitors the safety effort at BHTI facilities, such as Amarillo, Van Nuys, and others; and when requested, acts in a safety advisory capacity to BHTI affiliates and other Textron Divisions.

STANDARD PRACTICE INSTRUCTION Bell Helicopter <u>TEXTRON</u>	DATE 12-19-84	NUMBER 803A	
	SUPERSEDES 803	PAGE 2	OF 6

IV. PROCEDURE

A. INDUSTRIAL SAFETY COMMITTEE

1. The Industrial Safety Committee is established to monitor and guide the Industrial Safety Program. The committee consists of:

Vice President, Employee Relations - Chairman
Vice President, Operations
Vice President, Product Assurance
Director, Safety and Certification
Manager, Industrial Safety/Hygiene
Manager, Fire Protection
Manager, Facilities
Chief of Medical Services
Industrial Hygienist
Senior Safety Engineer - Secretary

2. The committee will meet at the call of the chairman to:
 - a. Review the Industrial Safety Program.
 - b. Provide guidance on corrective measures for combating accident trends as recommended by the Manager, Industrial Safety/Hygiene and the Manager, Fire Protection.
 - c. Provide guidance for maintaining and increasing interest in the Industrial Safety Program.

BHT 01053

B. INDUSTRIAL SAFETY/HYGIENE AND FIRE PROTECTION DEPARTMENT

The Industrial Safety/Hygiene and Fire Protection Department functions as a service unit to each department at all plants of BHT. As such, they will provide professional safety, health and fire prevention engineering capabilities and technical advice on hazards and methods of controlling them. Specific responsibilities are:

1. Develop, establish, promote, and administer the BHT Industrial Safety Program at all plants.
2. Prepare and issue FAPS for inclusion in the manual.
3. Provide technical safety, health and fire prevention advisory services to Executive management, Staff, and operating employees.
4. Working with Plant Engineering, Plant Maintenance and Manufacturing Engineering, design protective equipment or safety devices for use on machines and plant

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 12-19-84	NUMBER 803A	
	SUPERSEDES 803	PAGE 3	OF 6

equipment, and when necessary redesign the equipment to eliminate hazards.

5. Analyze standards, in terms of engineering concepts on which they are based, and apply these standards to meet specific situations.
6. Administer and conduct weekly surveys at all plants. Initiate corrective or preventive measures when required.
7. Secure and arrange to distribute posters, signs, and various communications pertaining to safety, health and fire prevention.
8. Conduct safety, health and fire protection training courses for supervisors, as well as orientation lectures for all new employees.
9. Assist supervisors in the investigation of safety, health and fire complaints, accidents involving personal injury, and property damage.
10. Recommend and arrange for the purchase of all items of personal safety, health and fire equipment for the protection of employees.
11. Maintain records of occupational accidents, injuries and fires in order to compile reports for submittal to management. Prepare and submit reports of industrial accidents occupational illnesses/diseases and fires as required by law and by the insurance carrier.
12. Maintain liaison with the Government Safety Officer at BHTI and with federal, state, city, and county safety and health officials.
13. Determine conformity to applicable standards of:
 - a. The Department of Defense
 - b. The U.S. Department of Labor
 - c. The Walsh-Healy Act BHT 01054
 - d. State, city, and local safety, health and fire codes and ordinances.
14. Review plant modification and construction plans and specifications from Plant Engineering, Plant Maintenance and Manufacturing Engineering to determine if

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Unit 1

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 12-19-84	NUMBER 803A	
	SUPERSEDES 803	PAGE 4	OF 6

safety, health and fire considerations are included or involved.

15. Control the prescription safety glasses program and provide necessary forms to those employees requiring glasses and whose work demands eye protection.
16. Monitor the program of inspection and load testing of hoists and cranes as established and performed by Plant Maintenance.
17. Authorize the shutdown of machines or equipment on which hazardous conditions exist by attaching a red tag. The red tag will remain on the machine until the situation is corrected to the satisfaction of the Industrial Safety/Hygiene and Fire Protection Department.
18. Authorize the stoppage of operations endangering employees or property until adequate personal protection, equipment and/or procedures as provided.

C. ALL DEPARTMENTS

1. When issuing Departmental Instructions which supplement FAPS, coordinate such instructions through the Industrial Safety/Hygiene and Fire Protection Department prior to their issuance.
2. Emphasize the compliance by all employees with FAPS and other basic rules of safety and fire prevention in performing their job assignments.

D. SUPERVISORS

Supervisors have the inherent responsibility for taking the necessary actions to eliminate or reduce accidents, to provide for the safety and health of personnel, and to protect equipment and prevent fires in areas under their jurisdiction. This includes:

1. Making certain that applicable safety, health and fire prevention features are incorporated in machinery and equipment or other property being acquired, modified, and/or used within their area of responsibility.
2. The preparation and issuance of any internal directives and instructions that are necessary to implement established safety, health fire prevention programs and procedures.

STANDARD PRACTICE INSTRUCTION Bell Helicopter <u>TEXTRON</u>	DATE 12-19-84	NUMBER 803A
	SUPERSEDES 803	PAGE 5 OF 6

3. --The utilization of applicable devices and services which are available through the Industrial Safety/Hygiene Section.
4. Reporting to responsible supervision and the Industrial Safety/Hygiene and Fire Protection Department any discovery of conditions which could be detrimental to the safety and/or health of employees.

E. EMPLOYEES

Each employee is responsible for the observance of the basic rules of safety, health and fire prevention in accordance with the standards established by the Company and federal, state, and local agencies. This includes:

1. Utilizing personal safety devices and other protective equipment provided by the Company.
2. Complying with all safety, health and fire prevention regulations, procedures, and practices.
3. Promptly reporting any hazardous conditions or other safety, health and fire prevention deficiencies to their supervision.

F. FACILITIES

1. Plant Maintenance will cooperate with Industrial Safety/Hygiene and Fire Protection to the fullest possible extent by giving highest priority to correcting hazardous conditions when detected and reported.
2. In conjunction with Industrial Safety/Hygiene, Fire Protection and Manufacturing Engineering, Plant Engineering will design safety guards and/or devices for use on plant equipment and machinery.
3. Plant Maintenance will establish and perform a scheduled program of inspection and load testing of all hoists and cranes used at all plants of BHT in accordance with the U. S. Department of Labor standards.
4. Plant Engineering will coordinate modification and construction plans and specifications through the Manager, Industrial Safety/Hygiene and the Manager, Fire Protection for compliance.

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 12-19-84	NUMBER 803A
	SUPERSEDES 803	PAGE OF 6 1 6

G. TOOL CRIBS

Issue items of personal safety equipment to those employees who require them.

STANDARD PRACTICE INSTRUCTION

Bell Helicopter **TEXTRON**

S P I	SUBJECT	
	INDUSTRIAL SAFETY AND HYGIENE PROGRAM	
	PREPARED BY E. D'Acosta	APPROVED BY <i>[Signature]</i>

NUMBER 803B
DATE 02-06-89
SUPERSEDES 803A
PAGE 1 OF 5

I. INTRODUCTION

Bell Helicopter Textron Inc. (BHTI) maintains a continuing industrial safety and hygiene program that encompasses all BHTI personnel and facilities. The Program is designed to identify and eliminate safety and health hazards to which employees might be exposed and is implemented in compliance with applicable federal, state and local laws and regulations. This SPI outlines the responsibilities and requirements associated with the Company Industrial Safety and Hygiene Program.

II. REFERENCES

MD 8-1, Safety Program

III. GENERAL

- A. The Industrial Safety and Hygiene Program is structured to involve all Company employees with particular emphasis on the role of the supervisor. Supervisors are expected to play the key role in ensuring that employees are fully aware of the provisions and requirements of the Company safety and health program. Additionally, supervisors are to maintain constant awareness of what is happening in their area(s) of responsibility with regard to working conditions, employee practices and employee conduct on the job.
- B. The Industrial Safety and Hygiene Department is the focal point in the company for matters relating to health and safety. The Department administers and coordinates the Industrial Safety and Hygiene Program as well as serving as the principal advisor to the Executive Staff and departments concerning industrial safety and health matters.
- C. Elements of the Industrial Safety and Hygiene Programs are contained in a written Program Plan which is prepared, maintained and distributed by the Industrial Safety and Hygiene Department. The Plan includes, but is not limited to topics concerning compliance with laws and regulations, accident investigation, personal protective equipment and clothing, training, self-inspection programs and record keeping.

BHT 01058

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 02-06-89	NUMBER 803B	
	SUPERSEDES 803A	PAGE 2	OF 5

- D. The Industrial Safety and Hygiene Program is guided and monitored by the Industrial Safety and Hygiene Committee. The committee consists of:

Sr. Vice President, Human Resources & Management
Information Systems - Chairman
Sr. Vice President, Manufacturing Operations
Vice President, Product Assurance & Producibility
Director, Safety and Certification
Manager, Facilities
Manager, Fire Protection
Manager, Industrial Safety/Hygiene
Manager, of Medical Services
Sr. Industrial Hygienist
Senior Safety Engineer - Secretary

The committee meets at the call of the chairman to:

- a. Review the Industrial Safety and Hygiene Program.
- b. Provide guidance on corrective measures for combatt-
ing accident trends as recommended by the Manager,
Industrial Safety and Hygiene.
- c. Provide guidance for maintaining and increasing in-
terest in the Industrial Safety and Hygiene Program.

IV. PROCEDURES

A. INDUSTRIAL SAFETY AND HYGIENE DEPARTMENT

1. Prepare, maintain and distribute the Industrial Safety and Hygiene Program Plan and related direc-
tives and instructions.
2. Administer the BHTI Industrial Safety and Hygiene Program with particular emphasis placed on the assis-
tance provided to supervision.
3. Assist Plant Engineering, Plant Maintenance and Manu-
facturing Engineering in designing protective equip-
ment and safety devices for use on machines and in
plant facilities.
4. Conduct Program audits at each BHTI facility at least
annually and assist supervision in correcting any de-
ficiences discovered during the audits.

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 02-06-89	NUMBER 803B	
	SUPERSEDES 803A	PAGE 3	OF 5

5. Promote industrial safety and health continuously by distributing signs, posters, etc. and by conducting training courses as required.
6. Assist supervisors in the investigation of safety and health complaints, accidents or incidents involving safety or health matters and maintain records of these events.
7. Determine the personal protective clothing and devices necessary for BHTI personnel and advise Procurement as required in obtaining these items.
8. Maintain liaison with the Government Safety Officer at BHTI and with federal, state, city, and county safety and health officials and ensure that the Company Program conforms to the applicable standards of the U.S. Departments of Labor and Defense, the Walsh-Healy Act and state, city, and local safety, health and fire codes and ordinances.
9. Review plant modification and construction plans and specifications from Plant Engineering, Plant Maintenance and Manufacturing Engineering to determine if health and safety considerations have been addressed adequately.
10. Administer the prescription safety glasses program.
11. Monitor the inspection program and load testing of hoists and cranes, as established and performed by Plant Maintenance, to ensure compliance with federal, state and local regulations.
12. Authorize the shutdown of machines or equipment on which hazardous conditions exist by attaching an appropriate tag. The tag will remain on the machine until the situation is corrected to the satisfaction of the Industrial Safety and Hygiene Department.
13. Authorize the stoppage of operations endangering employees or property until adequate personal protection, equipment and/or procedures is provided.

B. DEPARTMENTS

1. Coordinate Department Instructions which supplement Industrial Safety and Hygiene directives or instructions with the Industrial Safety and Hygiene Department prior to their issuance.

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 02-06-89	NUMBER 803B	
	SUPERSEDES 803A	PAGE 4	OF 5

2. Emphasize the requirement for employees to comply with Company procedures and rules pertaining to safety and health while performing their job assignments.

C. SUPERVISORS

Supervisors have the inherent responsibility for taking the necessary actions to eliminate or reduce accidents, to provide for the safety and health of personnel and to protect equipment and facilities in areas under their jurisdiction. Specific responsibilities shall be to:

1. Ensure employees are trained in overall safety practices, to include special emphasis on the equipment being operated.
2. Detect and correct unsafe working conditions and practices.
3. Require the use of machine safety guards and employee personal protective equipment and clothing and follow up frequently to ensure their continued use.
4. Maintain safety discipline and good housekeeping practices.
5. Provide a Safety Investigation Report to the Industrial Safety and Hygiene Department for each employee injury or illness within 24 hours after the occurrence.
6. Enforce BHTI industrial safety and hygiene policies and procedures.
7. Assist employees in obtaining personal protective equipment.

D. EMPLOYEES

Employees are responsible to observe the basic rules of safety and health in accordance with the standards established by BHTI and federal, state and local agencies. These include:

1. Complying with all safety and health regulations, procedures and practices.
2. Using personal safety devices and other protective equipment and clothing provided the Company.

BHT 01061

STANDARD PRACTICE INSTRUCTION Bell Helicopter TEXTRON	DATE 02-06-89	NUMBER 803B	
	SUPERSEDES 803A	PAGE 5	OF 5

3. Promptly reporting any hazardous condition or other safety or health deficiencies to supervision.
4. Report all injuries or illnesses to supervision as soon as possible.

E. FACILITIES

1. Plant Maintenance shall cooperate with Industrial Safety and Hygiene to the fullest possible extent by giving highest priority to correcting hazardous conditions when detected and reported.
2. In conjunction with Industrial Safety and Hygiene and Manufacturing Engineering, Plant Engineering shall design safety guards and/or devices for use on plant equipment and machinery.
3. Plant Maintenance shall establish and perform a scheduled program of inspection and load testing of all hoists and cranes used at all plants of BHTI in accordance with the U.S. Department of Labor Standards.
4. Plant Engineering shall coordinate modification and construction plans and specifications through the Manager, Industrial Safety and Hygiene for compliance.

F. TOOL/MATERIAL CRIBS

Issue items of personal protective safety equipment to those employees who require them.

BHT 01062



FIRE AND ACCIDENT
PREVENTION STANDARD
DEPARTMENT INSTRUCTION

INSTRUCTION NO.

1

DATE 7 April, 1970

SUBJECT

CLOTHING AND PERSONAL HYGIENE

APPROVED:

APPROVED:

Harry H. Coleman

PAGE 1 OF 2

I. Purpose

To establish a standard to be followed for the wearing of proper clothing and personal hygiene for all employees working in manufacturing operations.

II. Organization Components Affected

All departments in manufacturing areas.

III. Procedure

A. General

- a. This standard specifies that all employees working in manufacturing areas will wear proper clothing for the job and for the conditions of the area and indicates the need for personal hygiene while at work.
- b. Hazards inherent in various operations, such as moving parts in machines, electrical hook-up, handling of acids caustics and fuels, hand powered tools, etc., can be minimized by the wearing of proper clothing, personal hygiene and personal items of safety as required and/or recommended by the Safety Engineering Section.

B. Clothing

- a. Machinery - employees will wear conservative clothing neither too tight nor too loose fitting, sleeves buttoned at the wrist or cut short. In addition, all women employees doing actual manufacturing operations, such as aircraft assemblers, electrical assemblers, etc., must wear ankle length slacks.
- b. Acids or caustics - when handling acids or caustics all employees will use proper safety eye protection, acid suits, rubber gloves with sleeves covering the gauntlets of the gloves, rubber overshoes with trouser legs on the outside.
- c. Flame and hot metal - asbestos, wool or chrome leather garments are recommended rather than cotton garments.
- d. Jagged or sharp objects - use the proper glove for the job that is being performed but never wear gloves while actually operating a machine.

BELL HELICOPTER COMPANY
DEPARTMENT INSTRUCTIONS

DATE

7 Apr.1970

INSTRUCTION NO.

1

PAGE 2 OF 2

C. Footwear

- a. Safety shoes - it is highly recommended that safety toe shoes be worn at all times in the manufacturing areas.
- b. Other shoes - the wearing of sandals, moccasins, canvas, open toe, high heels or other footwear of soft or flimsy construction is prohibited in manufacturing areas.

D. Jewelry

- a. Due to the possibility of entanglement in machinery, etc., the wearing of long beads or chains, while performing manufacturing operations is prohibited. Employees should also avoid the wearing of rings, bracelets, etc.

E. Personal Protective Equipment

- a. In addition to the above, all items of personal protection issued by the company, should be utilized when required and/or recommended.

F. Personal Hygiene

- a. "Cleanliness is next to Godliness," still prevails in any industrial complex. When performing manufacturing operations, hair and beards must be so arranged that they will be kept clear of the work being performed. All other matters dealing with personal hygiene will be referred to the medical department.

 BELL HELICOPTER COMPANY POST OFFICE BOX 407 • FORT WORTH, TEXAS 76101 • A  COMPANY	FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION	INSTRUCTION NO. 12 DATE 30 March 1970
SUBJECT DUSTS, FUMES, AND MISTS	APPROVED: 	APPROVED:  PAGE 1 OF 4

I. Purpose

To establish the facts on industrial dusts, mists, and fumes, their hazards and their control.

II. Organization Components Affected

All departments where this type of environment exists.

III. Procedure

A. Health Hazards

- a. Except for the skin diseases, most occupational diseases are acquired by inhalation of material. Lung tissue is by far the most efficient medium the body possesses for absorbing materials.
- b. Certain dusts that reach the lungs can pass directly into the blood stream and be absorbed over a long period of time. Others may stay in the lungs and set up local irritant or damaging action.
- c. Toxic and irritant dusts can also be ingested in amounts that may cause trouble. If toxic dust swallowed with food or saliva is not soluble in body fluids, it is eliminated directly through the intestinal tract. Toxic materials that are readily soluble in body fluids can be absorbed in the digestive system and picked up by the blood.
- d. A third way in which toxic and irritant substances may enter the system is skin absorption. Many organic compounds, such as TNT, cyanides, and most aromatic amines, amides, and phenols, can produce systemic poisoning by direct contact with the skin. Contact of toxic and irritant dusts with skin also may result in skin irritation.
- e. As compared to inhalation, however, both ingestion and skin contact are of relatively minor importance in industrial poisoning insofar as dusts, fumes, and mists are concerned.

BHT 01065

B. Origin and Properties of Particulate Matter

- a. The term DUST as used in industry is generally applied to airborne solid particles that range in size from 0.1 micron to 25 microns (one micron = 1/10,000 centimeter) = (1/25,000 inch). Process dusts below 0.5 micron in size are rare. Dust above 5 microns in size usually will not stay airborne long enough to present an inhalation problem.
- b. Dust may enter the air from various sources. It may be dispersed when a dusty material is handled, such as when lead oxide is dumped into a mixer or a product is dusted with talc. Dust may be formed and dispersed when solid materials are reduced to small sizes in processes such as grinding, crushing, blasting, shaking, and drilling. In these processes, the mechanical action of the grinding or shaking device supplies a source of energy to disperse the dust formed.
- c. A mist is formed when a finely divided liquid is suspended in air. An example is the oil mist produced during cutting and grinding operations.
- d. Smoke may be formed by the incomplete combustion of organic materials. Smoke generally contains droplets as well as dry particles. Tobacco, for instance, produces a wet smoke composed of minute tarry droplets. The size of the particles contained in tobacco smoke is about 0.25 micron.
- e. When a solid such as a metal is heated to a temperature high enough to volatilize it, the volatilized matter later condenses in cooler air to form a fume. The solid particles that make up a fume are extremely fine, usually less than 0.5 micron in size. In some cases, the hot material reacts with the air to form an oxide. Examples are lead oxide fume from smelting and iron oxide fume from arc welding. Also a fume can be formed when a material such as magnesium metal is burned or when welding or gas cutting is done on galvanized metal.

C. Toxic Dusts and Fumes

- a. Systemic reactions are caused by toxic dusts and fumes of various elements and their compounds and by certain organic compounds, all metallic fumes are irritating, especially when freshly generated. Industrially important metals and their compounds that can have a toxic effect when the dust or fume is inhaled include arsenic, antimony, cadmium, chromium, lead, manganese, mercury, selenium, tellurium, thallium, uranium, and a few others.
- b. The effect of some metals, such as magnesium and zinc, appears to be transient. Other limited data are available on the exotic and rare earth metals.

- c. Although the dusts and fumes from metals with low toxicity do not need as much attention as the dusts and fumes from highly toxic metals, they should not be neglected or disregarded. The metals with low toxicity are controlled more readily because greater amounts can be tolerated, but their dusts and fumes should be kept at reasonable levels since excessive amounts of any of them can be harmful.

D. Personal Protective Equipment

- a. Respirators of various designs are available which will give protection against toxic and pneumoconiosis - producing dusts by filtering out the contaminant from the air. The U. S. Bureau of Mines has set up performance standards for dust respirators and gives approval to respirators that meet these standards. It is important that a respirator be used only for the particular dust exposure for which it has been approved. The tool crib attendant will issue the proper respirator after receiving an AVO from the employee's supervisor.
- b. Although approved respirators will give excellent protection when properly fitted, they should be used only as supplements to other methods of control or for short or occasional exposures and not as primary controls.
- c. Proper fitting of a mechanical filter respirator to the face of the individual is most important because a small space between the facepiece and the face will permit dustladen air to bypass the filter.
- d. Respirators must be inspected and cleaned daily. Filters should be replaced before they become so plugged with dust as to seriously increase resistance to breathing. Proper filters for replacement are available in the tool cribs as well as respirators.
- e. Although the most effective method of control is to prevent contamination of workroom air and thus prevent inhalation of harmful dusts, the importance of personal hygiene should not be overlooked. The periodic medical examination provides a good opportunity for instruction of employees in various personal hygiene measures.
- f. Good washing facilities, clean lunchrooms, and clean work clothes can help prevent additional, even though minor, exposure to toxic materials. Also, contaminated work clothes should not be taken home where a toxic dust could contaminate the home.

BELL HELICOPTER COMPANY
DEPARTMENT INSTRUCTIONS

DATE

30 Mar. 1970

INSTRUCTION NO.

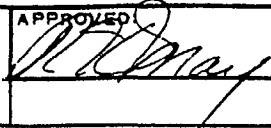
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PAGE 4 OF 4

E. Health Program

- a. To protect the health of employees at Bell Helicopter Company who may work where a dust, fumes, or mist created by a manufacturing process is released into the atmosphere, a control program may be required. In such a case, three steps must be taken:
 1. The properties of the specific dust, fume, or mist and its possible physiological effects on employees must be ascertained.
 2. The particular exposure must be evaluated by dust counts or by chemical analysis of air samples, and a step-by-step analysis of the operation must be made to find the areas where employees are exposed to hazardous amounts of the material. The operational analysis also should determine how the dust fume, or mist is dispersed.
 3. Appropriate methods of control must be provided where indicated. The type and extent of controls will depend upon the physical, chemical, and toxic properties of the dust, fume, or mist, the evaluation made of the exposure, and the operation that disperses the contaminant.
- b. The Plant Engineering Department of Bell Helicopter Company has been designated as the environmental and pollution control group for our company.

BHT 01068

Bell Helicopter TEXTRON Division of Textron Inc.		FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION	INSTRUCTION NO. 12A Supersedes 3/30/70 DATE 10/28/82
SUBJECT DUSTS, FUMES, AND MISTS		APPROVED: 	APPROVED: PAGE 1 OF 4

I. Purpose

To establish the facts on industrial dusts, mists, and fumes, their hazards and their control.

II. Organization Components Affected

All departments where this type of environment exists.

III. Procedure

A. Health Hazards

1. Except for the skin diseases, most occupational diseases are acquired by inhalation of material. Lung tissue is by far the most efficient medium the body possesses for absorbing materials.
2. Certain dusts that reach the lungs can pass directly into the blood stream and be absorbed over a long period of time. Others may stay in the lungs and set up local irritant or damaging action.
3. Toxic and irritant dusts can also be ingested in amounts that may cause trouble. If toxic dust swallowed with food or saliva is not soluble in body fluids, it is eliminated directly through the intestinal tract. Toxic materials that are readily soluble in body fluids can be absorbed in the digestive system and picked up by the blood.
4. A third way in which toxic and irritant substances may enter the system is skin absorption. Many organic compounds, such as TNT, cyanides, and most aromatic amines, amides, and phenols, can produce systemic poisoning by direct contact with the skin. Contact of toxic and irritant dusts with skin also may result in skin irritation.
5. As compared to inhalation, however, both ingestion and skin contact are of relatively minor importance in industrial poisoning insofar as dusts, fumes, and mists are concerned.

BHT 01069

Bell Helicopter TEXTRON	DATE	NUMBER
	10-28-82	12A
	SUPERSEDES 3/30/70	PAGE OF 2 4

B. Origin and Properties of Particulate Matter

1. The term dust is used in industry as generally applied to airborne solid particles that range in size from 0.1 micron to 25 microns (one micron = 1/10,000 centimeter) = (1/25,000 inch). Process dusts below 0.5 micron in size are rare. Dust above 5 microns in size usually will not stay airborne long enough to present an inhalation problem.

Dust may enter the air from various sources. It may be dispersed when a dusty material is handled, such as when lead oxide is dumped into a mixer or a product is dusted with talc. Dust may be formed and dispersed when solid materials are reduced to small sizes in processes such as grinding, crushing, blasting, shaking, and drilling. In these processes, the mechanical action of the grinding or shaking device supplies a source of energy to disperse the dust formed.

2. A mist is formed when a finely divided liquid is suspended in air. An example is the oil mist produced during cutting and grinding operations.
3. Smoke may be formed by the incomplete combustion of organic materials. Smoke generally contains droplets as well as dry particles. Tobacco, for instance, produces a wet smoke composed of minute tarry droplets. The size of the particles contained in tobacco smoke is about 0.25 micron.
4. When a solid such as a metal is heated to a temperature high enough to volatilize it, the volatilized matter later condenses in cooler air to form a fume. The solid particles that make up a fume are extremely fine, usually less than 0.5 micron in size. In some cases, the hot material reacts with the air to form an oxide. Examples are lead oxide fume from smelting and iron oxide fume from arc welding. Also a fume can be formed when a material such as magnesium metal is burned or when welding or gas cutting is done on galvanized metal.

C. Toxic Dusts and Fumes

1. Systemic reactions are caused by toxic dusts and fumes of various elements and their compounds and by certain organic compounds, all metallic fumes are irritating, especially when freshly generated. Industrially important metals and their compounds that can have a toxic effect when the dust or fume is inhaled include arsenic, antimony, cadmium, chromium, lead, manganese, mercury, selenium, tellurium, thallium, uranium, and a few others.

Bell Helicopter TEXTRON	DATE	NUMBER
	10/28/82	12.A
	SUPERSEDES	PAGE OF
	3/30/70	3 4

2. The effect of some metals, such as magnesium and zinc, appears to be transient. Other limited data are available on the exotic and rare earth metals.
3. Although the dusts and fumes from metals with low toxicity do not need as much attention as the dusts and fumes from highly toxic metals, they should not be neglected or disregarded. The metals with low toxicity are controlled more readily because greater amounts can be tolerated, but their dusts and fumes should be kept at reasonable levels since excessive amounts of any of them can be harmful.

D. Personal Protective Equipment

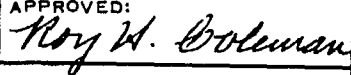
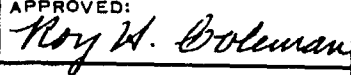
1. Respirators of various designs are available which will give protection against toxic and pneumoconiosis producing dusts by filtering out the contaminant from the air. The National Institute of Occupational Safety and Health (NIOSH) and the Mine Safety and Health Administration (MSHA) have set up performance standards for dust respirators and give approval to respirators that meet these standards. It is important that a respirator be used only for the particular dust exposure for which it has been approved. The tool crib attendant will issue the proper respirator after receiving an AVO from the employee's supervisor.
2. Although approved respirators will give excellent protection when properly fitted, they should be used only as supplements to other methods of control or for short or occasional exposures and not as primary controls.
3. Proper fitting of a mechanical filter respirator to the face of the individual is more important because a small space between the facepiece and the face will permit dustladen air to bypass the filter.
4. Respirators must be inspected and cleaned daily. Filters should be replaced before they become so plugged with dust as to seriously increase resistance to breathing. Proper filters for replacement are available in the tool cribs as well as respirators.
5. Although the most effective method of control is to prevent contamination of workroom air and thus prevent inhalation of harmful dusts, the importance of personal hygiene should not be overlooked. The periodic medical examination provides a good opportunity for instruction of employees in various personal hygiene measures.

Bell Helicopter TEXTRON	DATE 10/28/82	NUMBER 1 A
	SUPERSEDES 3/30/70	PAGE OF 4 4

6. Good washing facilities, clean lunchrooms, and clean work clothes can help prevent additional, even though minor, exposure to toxic materials. Also, contaminated work clothes should not be taken home where a toxic dust could contaminate the home.

E. Health Program

1. To protect the health of employees at Bell Helicopter who may work where a dust, fume, or mist created by a manufacturing process is released into the atmosphere, a control program may be required. In such a case, three steps must be taken:
 - a. The properties of the specific dust, fume, or mist and its possible physiological effects on employees must be ascertained.
 - b. The particular exposure must be evaluated by dust counts or by chemical analysis of air samples, and a step-by-step analysis of the operation must be made to find the areas where employees are exposed to hazardous amounts of the material. The operational analysis also should determine how the dust, fume, or mist is dispersed.
 - c. Appropriate methods of control must be provided where indicated. The type and extent of controls will depend upon the physical, chemical, and toxic properties of the dust, fume, or mist, the evaluation made of the exposure, and the operation that disperses the contaminant.
2. The Environmental Management Department of Bell Helicopter has been designated as the environmental and pollution control group for our company.

 BELL HELICOPTER COMPANY PLANT OFFICE BELL CO. 1001 NORTH 12TH ST. TOLSON, A BELL COMPANY		FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION		INSTRUCTION NO. 40
SUBJECT VENTILATION		APPROVED: 		DATE 30 Sept. 1971 APPROVED: 
				PAGE 1 OF 2

I. Purpose

To establish a standard for ventilation requirement at Bell Helicopter Company.

II. Organization Components Affected

All departments

III. Procedure

A. Process Ventilation

- a. All atmospheres wherein industrial processes such as heating, welding, burning, degreasing, plating, melting, curing, mixing, preservation, and similar processes generate and/or liberate harmful concentrations of gases, fumes, vapor, dusts, and mists creating harmful exposures by inhalation, ingestion, skin absorption, at or above the threshold limit values as shown in (OSHA, Subpart G, Section 1910.93) shall be safeguarded by feasible engineering controls (a properly designed ventilation system), or administrative controls (rotating personnel to minimize the individuals exposure).
- b. Where the controls are not possible or practical and personal protective equipment is used, it must be approved for each specific application by a competent industrial hygienist or other technically qualified source. (See 20 Title 41 CFR 50-204.50, Section .50(a), Gases, Vapors, Fumes, Dusts and Mists).

B. Local Exhaust Ventilation

- a. Mechanical ventilation and equipment - where mechanical ventilation equipment is used to reduce the contaminant concentrations to or below the specified limits, periodic testing shall be done to maintain a safe level.
- b. Local exhaust systems
 - (1) Plant layout and construction shall include exhaust ventilation requirements. (See 15 USAS Z9.2, Section 3.1, Fundamentals Governing the Design and Operation of Local Exhaust Systems).

30 Sept. '71

40

2 of 2

(2) Processes to be exhausted by a single system should be located close together. (See 15 USAS Z9.2, Fundamentals Governing the Design and Operation of Local Exhaust Systems).

(3) Where processes generate different dusts, fumes, or vapors which could, if intermixed, result in an explosive atmosphere, such contaminants shall be exhausted by separate systems so as to eliminate this possibility. (See 15 USAS Z9.2, Fundamentals Governing the Design and Operation of Local Exhaust Systems).

(4) Provision should be made for the entrance of clean, tempered air into the building to replace air removed by exhaust systems. The volume flow of such make-up air should be equal to or greater than the exhaust rate.

(5) The intake for the air supply shall be so located as to prevent insofar as possible the intake of contaminants from exhaust systems, process vents, or other sources. (See 15 USAS Z9.2, Section 3.6.6(2), Fundamentals Governing the Design and Operation of Local Exhaust Systems).

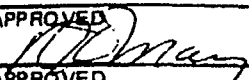
(6) Exhaust hoods should be so designed and located as to provide the necessary air velocity with the lowest possible air flow.

(7) Inlets should be so arranged and located so that workers are not subject to drafts of air.

(8) Every establishment performing dry grinding, dry polishing or buffing shall provide suitable hoods or enclosures that are connected to exhaust systems. Such exhaust systems shall be operated on, and be capable of preventing contaminants from entering the breathing zone. (See 74 USAS Z43.1, Section 3.1, Ventilation Control of Grinding, Polishing and Buffing Operations).

(See OSHA, Subpart G, Section 1910.94, FR 10506, 10507, 10512, 10515).

BHT 01074

Bell Helicopter TEXTRON A Subsidiary of Textron Inc.	FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION	INSTRUCTION NO. 40A DATE 10/28/82
SUBJECT VENTILATION	APPROVED  APPROVED	SUPERSEDES Sept. 30, 1971 PAGE 1 OF 2

I. Purpose

To establish a standard for ventilation requirement at BHTI.

II. Organization Components Affected

All departments

III. Procedure

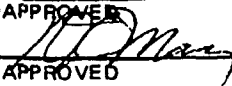
A. Process Ventilation

1. All atmospheres wherein industrial processes such as heating, welding, burning, degreasing, plating, melting, curing, mixing, preservation, and similar processes may generate and/or liberate harmful concentrations of gases, fumes, vapor, dusts, and mists creating harmful exposures. If these concentrations are above the Permissible Exposure Limit (PEL) as shown in (OSHA, Subpart Z) they shall be safeguarded by feasible engineering controls (a properly designed ventilation system) of administrative controls (rotating personnel to minimize the individuals exposure).
2. Where the controls are not possible or practical and personal protective equipment is used, it must be approved for each specific application by a competent industrial hygienist or other technically qualified source. (See Respiratory Protection, Instruction No. 20A).

B. Local Exhaust Ventilation

1. Mechanical ventilation and equipment when used to reduce the contaminant concentrations to or below the specified limits, shall be periodically tested to maintain a safe level.
2. Local exhaust systems
 - a. Plant design and construction shall include exhaust ventilation requirements.
 - b. Processes to be exhausted by a single system should be located close together.
 - c. Where processes generate different dusts, fumes, or vapors which could, if intermixed, result in an explosive atmosphere, such processes shall be exhausted by separate systems so as to eliminate this possibility.

BHT 01075

Bell Helicopter TEXTRON A Subsidiary of Textron Inc.		FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION		INSTRUCTION NO. 40A DATE 10/28/82	
SUBJECT VENTILATION		APPROVED  APPROVED		SUPERSEDES Sept. 30, 1971 PAGE 2 OF 2	

d. Provision should be made for the entrance of clean, tempered air into the building to replace air removed by exhaust systems. The volume flow of such make-up air should be greater than the exhaust rate.

e. The intake for the air supply shall be so located as to prevent the intake of contaminants from exhaust systems, process vents, or other sources.

f. Exhaust hoods should be so designed and located as to provide the necessary air velocity with the lowest possible air volume.

g. Inlets should be so arranged and located so that workers are not subject to drafts of air.

h. Every establishment performing dry grinding, dry polishing or buffing shall provide suitable hoods or enclosures that are connected to exhaust systems. Such exhaust systems shall be operated on, and be capable of preventing contaminants from entering the breathing zone.

(See OSHA, Subpart G, Section 1910.94).

BHT 01076

		PROCEDURE NO: 26
BELL HELICOPTER TEXTRON SAFETY AND HEALTH PROCEDURE		
SUBJECT: HAZARD COMMUNICATION PROGRAM		DATE ISSUED: 5/25/86
REVISED:	REVISION NO:	PAGE <u>1</u> OF <u>8</u>
APPROVED <i>Timothy R. Racicot</i>		APPROVED:

1.0 HAZARD COMMUNICATION

1.1 Purpose

The purpose of the Bell Helicopter Textron Inc. (BHTI) Hazard Communication Program is to establish standard procedures and practices and uniform requirements in reducing the incidence of illnesses and injuries resulting from exposure to chemicals by communicating information about their potential hazards. The standard includes provisions for container labeling, Material Safety Data Sheet (MSDS) availability, a list of hazardous chemicals for all work areas, the means of informing employees of the hazards of non-routine tasks, hazards associated with chemicals in unlabeled pipes, informing contractors within and outside of our facility of the hazards to which their employees may be exposed, and an employee training program. The regulation requiring this program is 29 C.F.R. 1910.1200, Hazard Communication. The management of BHTI supports all provisions of this standard and is committed to maintaining compliance at all times. The obligation of BHTI under the OSHA Hazard Communication Standard and related provisions of the Right-to-Know Laws (Federal, State and Local) are intended to increase employee awareness and decrease related worker injury or illnesses by:

- 1.1.1 Obtaining MSDS's for hazardous materials to which employees may be exposed.
- 1.1.2 Establishing a labeling system providing the name of the manufacturer, chemical or trade name, hazardous classification and other precautions.
- 1.1.3 Providing employee training.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 2 OF 8

1.2 Procedure

1.2.1 Hazard Determination

1.2.1.1 Chemical manufacturers, importers and distributors of hazardous materials are required to assess the hazards of chemicals which they produce, import or distribute, and all employees in SIC Codes 20 through 30, are to provide information to their employees about the hazardous materials to which they are exposed by means of a hazard communication program, labels, MSDS's, training and other forms of warning.

1.2.1.2 This procedure applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

1.2.2 Enforcement

1.2.2.1 Chemical manufacturers and importers shall label containers of hazardous materials leaving their workplaces, and provide MSDS's with initial shipments by November 25, 1985.

1.2.2.2 Distributors shall be in compliance with all provisions of this standard applicable to them by November 25, 1985.

1.2.2.3 Employers shall be in compliance with all provisions of this standard by May 25, 1986, including initial training for all current employees exposed to hazardous materials.

1.2.2.4 Departmental supervision will assure compliance with this program to effect the protection of employees from workplace health hazards.

1.2.2.5 Each employee is also responsible for the protection of his or her health and safety in this compliance program.

1.2.2.6 Since this program follows mandatory regulations as set forth by OSHA and BHTI, noncompliance or non-participation in this program can result in disciplinary action.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 3 OF 8

2.0 STANDARDS AND INTERPRETATIONS

2.1 Hazardous Material Identification

- 2.1.1 Identification of hazardous materials in the workplace will be continuously inventoried by the Industrial Safety and Hygiene staff and appropriate measures will be taken to acquire all respective MSDS's for these materials.
- 2.1.2 A list of all hazardous materials known to be present in all workplaces will be located at the designated microfiche reader containing the applicable MSDS's.
- 2.1.3 The list of hazardous materials will be compiled for the workplace as a whole and not for individual work areas.

2.2 Labels and Other Forms of Warning

- 2.2.1 All chemical manufacturers, importers and distributors shall ensure that each container of hazardous material leaving the workplace is labeled, tagged or marked with the following information:
 - 2.2.1.1 Identity of the hazardous chemical(s),
 - 2.2.1.2 Appropriate hazard warnings, and
 - 2.2.1.3 Name and address of the chemical manufacturer, importer, distributor, or other responsible party.
- 2.2.2 All chemical manufacturers, importers and distributors shall ensure that all labeled containers mentioned in this section do not conflict with the requirements of the Hazardous Materials Transportation Act (18 U.S.C. 1801 et seq.) and regulations issued under that Act by the Department of Transportation.
- 2.2.3 If the hazardous material is regulated by OSHA in a substance-specific health standard, the chemical manufacturer, importer, distributor and BHTI shall ensure that the labels or other forms of warning are used in accordance with the requirements of this standard.
- 2.2.4 BHTI is not required to label portable containers into which hazardous materials are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 4 OF 8

- 2.2.5 Employees shall not remove or deface existing labels on incoming containers of hazardous materials unless the container is immediately marked with the required information.
- 2.2.6 Request for container labels for specific materials shall be made by supervision from the Industrial Safety and Hygiene Department or from the Material Code Catalog as applicable.
- 2.2.7 Hazardous materials repackaged for BHTI by outside vendors shall be labeled appropriately so as to meet all labeling requirements under this standard.
- 2.2.8 Spare parts or kits supplied by BHTI to downstream customers that fall under the definition of "Hazardous Materials" shall be appropriately labeled to meet all labeling requirements under this standard.

2.3 Material Safety Data Sheets (MSDS's)

- 2.3.1 Chemical manufacturers and importers shall obtain or develop a MSDS for each hazardous material they produce or import.
- 2.3.2 BHTI shall have a MSDS for each hazardous material used at its facilities.
- 2.3.3 BHTI will make provisions for obtaining MSDS's from chemical manufacturers, importers and distributors by the addition of a statement added to the Terms and Agreements in the standard Purchase Order, where the responsible party is to send MSDS's with each shipment of hazardous materials directly to the Industrial Safety and Hygiene Department.
- 2.3.4 MSDS requests will be made on a continuing basis whenever the need arises by sending a BHTI MSDS Request form to the respective manufacturer or vendor.
- 2.3.5 The chemical manufacturer, importer or distributor preparing the MSDS shall be responsible for ensuring that it is written in English and that the information is recorded accurately and reflects the scientific evidence used in making the hazard determination.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 5 OF 8

- 2.3.6 If the chemical manufacturer, importer or distributor preparing the MSDS's becomes newly aware of any significant information regarding the hazards, this new information shall be added to the MSDS within three months or if the chemical is not currently being produced, the information shall be added to the MSDS before the chemical is introduced into the workplace again.
- 2.3.7 Transmittal of MSDS's will take place in the form of microfiche with all current MSDS's printed on microfiche and grouped in a microfiche packet.
- 2.3.8 BHTI shall maintain copies of the required MSDS's for each hazardous material in the workplace on microfiche, and shall ensure that microfiche packages are readily accessible during each work shift to employees when they are in their work areas by means of a microfiche reader.
- 2.3.9 MSDS's shall also be made readily available, upon request, to designated representatives and to the Assistant Secretary in accordance with the requirements of 29 C.F.R. 1910.20(e).
- 2.3.10 MSDS's shall be provided to all downstream customer supply and service centers as well as to all active BHTI customers.
- 2.3.11 Employees may obtain their own copy of MSDS's if they so desire by submitting a verbal or written request to the Industrial Safety and Hygiene Department. Employees will be required to sign a request form stipulating which MSDS(s) they receive and in doing so, release BHTI of all liability if the information contained on the MSDS is designated by the manufacturer as a trade secret, and is used by the employee for reasons other than that of an occupational health need as required under 29 C.F.R. 1910.1200.
- 2.3.12 BHTI shall revise and update the MSDS package on a three to six month basis. This may include, but is not limited to, additional supplements to the microfiche packet or a complete reprint of the entire microfiche package to include new and/or revised MSDS's.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 6 OF 8

2.4 Training

- 2.4.1 BHTI shall provide employees with information and training on hazardous chemicals and their characteristics as well as evaluate any specific new hazards introduced into their work area.
- 2.4.2 Employees shall be informed of:
 - 2.4.2.1 The requirements of this section,
 - 2.4.2.2 Recognition and identification of hazardous chemicals and their characteristics, and
 - 2.4.2.3 The location and availability of this written Hazard Communication Program including a listing of all hazardous materials and MSDS's.
- 2.4.3 Employee training shall include methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area, which would include industrial hygiene monitoring or visual appearance or odor of hazardous chemicals when being released.
- 2.4.4 Employee training shall include the physical and health hazards of the chemicals in the work area.
- 2.4.5 Training shall include measures that employees can take to protect themselves from health hazards in the work area, such as appropriate work practices, emergency procedures, personal protective equipment to be used, labeling requirements and an explanation of the MSDS.
- 2.4.6 Employee training shall include the opportunity for employees to inquire specifically about hazardous materials used in their immediate work area and what precautions are necessary to protect them from such materials.
- 2.4.7 Training will include health information on materials used in specific work areas with emphasis placed on hazardous materials common to that work area and that have been of concern or question on occasions in the past.

		PROCEDURE NO: 26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE 7 OF 8

2.4.8 Employees shall be informed of the need to contact the Industrial Safety and Hygiene Department when working on unlabeled pipes or performing non-routine tasks, so as to gain safety and health information prior to performing such work.

2.5 Trade Secrets

2.5.1 Employees shall be informed that the chemical manufacturer, importer or employer may withhold the specific chemical identity, including the chemical name and other specific identification of a hazardous chemical from the MSDS provided that:

2.5.1.1 The trade secret claim can be supported.

2.5.1.2 Hazardous properties of the material is disclosed on the MSDS.

2.5.1.3 The MSDS indicates that the chemical identity is being withheld as a trade secret.

2.5.1.4 The specific chemical identity is made available to the Industrial Safety and Hygiene Department.

2.5.2 When a medical emergency exists, the chemical manufacturer, importer or employer must disclose the information of a trade secret chemical to the treating physician or nurse regardless of a written statement of need or a confidentiality agreement, but which may be required at a later date as soon as circumstances permit.

2.5.3 In non-emergency situations, a chemical manufacturer, importer or employer shall, upon request, disclose a specific chemical identity, unless withheld under 2.5.1 of this section, to a health professional if the request is in writing and is needed for occupational health purposes. The request must also explain in detail why the disclosure of the specific chemical identity is essential and what procedure will be used to maintain the confidentiality of the disclosed information. The written confidentiality agreement must be signed and completed by all parties receiving the confidential information to guarantee that the trade secret information will not be used for any purpose other than the health needs asserted and agree not to release the information under any circumstances other than to OSHA.

		PROCEDURE NO:	26
SUBJECT: HAZARD COMMUNICATION PROGRAM	DATE ISSUED: 5/25/86	PAGE	8 OF 8

2.5.4 Employees shall be informed that if for any reason trade secret information for occupational health purposes is denied by the chemical manufacturer or importer, and all legitimate measures are taken by BHTI to gather such information, the employee and/or BHTI may seek the assistance of OSHA.

2.6 Contractors and Sub-Contractors

2.6.1 BHTI has made provisions to inform contractors and sub-contractors as well as any other services taking part on BHTI premises by the addition of a statement added to the Terms and Agreements section of the standard Purchase Order, where the responsibility of the contractor, sub-contractor and BHTI is made known to inform all contractor employers with employees of the hazardous materials they may be exposed to while performing their work.

2.7 Inspection and Evaluation of the Program

2.7.1 Regular inspections of the various requirements of the Hazard Communication Program will be performed and evaluated to determine the continued effectiveness of the program by members of the Industrial Safety and Hygiene Department.

 BELL HELICOPTER COMPANY A DIVISION OF BELL HELICOPTER COMPANY, INC.	FIRE AND ACCIDENT PREVENTION STANDARD DEPARTMENT INSTRUCTION	INSTRUCTION NO. 42 DATE 6 Oct. 1971
SUBJECT LABELING OF HAZARDOUS MATERIALS	APPROVED: <i>Roy H. Coleman</i>	APPROVED: PAGE 1 OF 1

I. Purpose

To establish a standard for labeling of hazardous materials at Bell Helicopter Company.

II. Organization Components Affected

All departments which might come in contact with hazardous materials.

III. Procedure

A. Identification and labeling of hazardous materials.

In processing operations or storage locations where the danger of hazardous materials may not be readily apparent, to those individuals concerned with emergency personnel, fires and the health of those therein, a signal system for identifying such materials in terms of "health," "flammability," and "reactivity" and their relative degrees of severity shall be employed. (See NFPA 704M). It shall serve as a guide for the implementation of this system.

B. Information on hazardous materials.

The use and processing of materials which are dangerous to workers due to fire, explosion, health and reactivity hazards shall not be allowed unless the employer has ascertained the information on potential hazards prescribed in the "Material Safety Data Sheet," and has instructed the employees who will be exposed and establish necessary controls.

(See Inspection Survey Guide, United States Department of Labor, Workplace Standards Administration).