### **HELICOPTER SAFETY**

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### **Taking Responsibility For Safety Training**

The author encourages helicopter operators to play a major role in the creation of an appropriate program of safety training for their pilots.

by

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A majority of accidents have been attributed to pilot error. However, an investigative study shows that management could be responsible for up to 50 percent of accidents, and here are some of the reasons why:

- Management does not always allow proper training.
- Proper manuals or equipment are not always available.
- Management fails to communicate to pilots and maintenance people.
- Management places people into environments they cannot handle.

When talking safety, there are three areas of human-error accidents in which pilots can get caught:

- Lack of knowledge Accidents characterized by errors of judgment resulting from lack of knowledge upon which to base sound decisions.
- Lack of skill Skill of pilots is not maintained.
- Lack of discipline Guidelines must be established to give proper directions.

When discussing training, we must do what Vince Lombardi once did — return to basics. A recent study of organizations that have the greatest productivity of people and the highest safety record showed that an organization must:

- Be effectively staffed and be people oriented.
- · Have high ethics and be competitive.

• Have a "can-do" attitude and high esprit de corps.

In turn, supervisors and managers must:

- Be competitive in staffing.
- Have competence in handling complexities and problems in dealing with new concepts.
- · Have ability to direct.
- Be honest to employees.

#### Seek the 'Safest' Individuals

Individuals who will be the safest and most productive are:

- Well qualified for the job.
- · Highly motivated.
- Positively oriented to the job.
- Mature and require minimum supervision.

A company goal is to reduce accidents by properly training pilots. Training programs must be established, controlled and adhered to.

The following characteristics will be shown by pilots who attend and complete reputable schools with good flight programs and personnel:

- A. Enthusiasm.
- B. Motivation.

- C. Competence.
- D. Knowledge.
- E. Pilots pass on their newly acquired information to other pilots.

#### **Research the Types of Training**

The type of training program is the key to a successful safety program. How you train a pilot is how he will perform. Needed ingredients include:

- Good environment. It will inspire your pilot.
- A professional and thorough approach.
- Enthusiasm.
- · Completeness.

Types of training programs include: initial flight programs, private, commercial-instrument/ATP training, recurrent training and transition into new models.

Types of ground school include: instructor pilot/pilot courses and self-pace courses. Additional considerations include:

- 1. The course must be organized, comprehensive and controlled.
- 2. Formal course advantages (one to one).
  - a. Regulations and flight test guide maneuvers.
  - b. All systems, limitations and emergencies must be covered.
  - c. Flight manual discussed in detail, with emphasis on performance.
  - d. All questions can be answered while they are on the pilot's mind.
  - e. Pilot involvement and thorough coverage.
- 3. Self-pace program advantages.
  - a. Not as many instructors are needed.
  - b. Pilots can take course at their own pace.
  - c. Course may be used as a review.
- 4. Material to cover.
  - a. Make sure all systems are covered.

- b. All emergency procedures are covered and understood.
- c. Flight manual is understood (performance data, et.).
- d. Stress safety.
  - (1) Wire strike.
  - (2) Fuel starvation.
  - (3) Weather hazards.
  - (4) Pilot fatigue.
  - (5) Company policy on alcohol and personal appearance.

#### **Provide Adequate Training Curriculum**

Flight training curriculum in transition programs:

- 1. "Quickie" checkouts are no longer adequate in new aircraft.
  - a. Many times, pilots are rushed into job.
  - b. Do not rush the flight training, and be flexible with the program. Set pace compatible to pilot.
  - c. Let pilot learn feel of aircraft and stress basic maneuvers. After pilot is comfortable, move on to emergency procedures.
  - d. Student must learn how to react instantly.
  - e. Cover autorotations in a single-engine aircraft.
    - (1) Cover autorotations from different altitudes and different airspeeds.
    - (2) If touchdown autorotations are not allowed, conduct power recoveries.
    - (3) Autorotations must be in a controlled environment, and student must understand the rules.
  - f. Cover tail rotor failures.
    - (1) Preparation for this emergency is a real weakness in the industry.
    - (2) If a student does not have ready recollection on the ground, he will not have a chance in the air.
  - g. Cockpit discipline is the key to emergency procedures.

#### **Present Proper Refresher Training**

- Corporation should establish recurrent training. In the future, it will be a common program in helicopters. However, today we have to push it to encourage management to allow it.
- Professional pilots care about flying and require refresher programs.
- Pilot proficiency should review the basic material and then sharpen him even more on the emergency procedures.

#### **Incorporate Future Training Trends**

- A. Audio-visual programs, movies, etc., are being produced and are a tremendous aid in flight department training areas.
- B. Cockpit procedure trainers computer driven.
- C. Simulators.
  - 1. Outstanding training tool. Future will demand it.

- 2. Cost is high.
- 3. Quality of training will improve.
  - a. You can work on certain procedures.
  - b. Students will learn procedures better and quicker.
  - c. Practice procedures repetitively.
  - d. More time can be spent with people on cockpit discipline.

The bottom line is the "attitude" of pilots and instructors. People with a proper attitude are doers, motivators, filled with enthusiasm, confident and good managers of time.

Those who do their own thinking and use their own knowledge also have an appropriate outlook. They listen to others and make their own conclusions.

To have a suitable manner, one must be (1) honest, (2) have character and (3) be dependable. A person's attitude is more important than a person's aptitude. ◆

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