

Docket No. SA-530

Exhibit No. 8 - L

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Bell Training Academy Submission

EMS NVG Brief

(8 Pages)

NTSB EMS NVG BRIEF



INTRODUCTION

- **Bell Training Academy (BTA) focus is basic to advanced flight skills.**
- **Training is more than just flying skills.**
- **It includes smart and safe decision making.**
- **NVG's are not a cure-all.**
- **Weather Minimums (Do not change from night unaided).**
- **Training should Crawl, Walk and then Run.**

NVG MYTHS

- **NVG's are too heavy, and have limitations.**
- **NVG's only have a 40 degree field of view.**
- **NVG's can not be used in a Urban Environment.**
- **NVG's see through clouds, "so Inadvertent IMC is a big problem."**
- **NVG's are too expensive (Compare cost vs. useful life).**
- **NVG aircraft modifications too costly.**

WHY NVG'S

- **Simply put, “NVG’s make the shadows go away”.**
- **Increase unit’s capability within Visual Meteorological Conditions.**
- **Increase Pilot/Crew’s situational awareness and decrease anxiety.**
- **Added safety for Emergency Landings.**
- **Ability to combine NVG and FLIR technology.**
- **Increases Avn. Law Enforcement/SAR/EMS ability to assist ground units.**

TRAINING

- **Ensure training program has a standards.**
- **Going the FAR 141 route brought NVG's to the national approval level.**
- **Should cover Basic Flight Tasks, Mission Tasks and Emergency Procedures.**
- **Should instill confidence in the pilot's/crewmembers ability and equipment.**
- **The goal is that NVG's are just another way to work at night.**

Training Issues

-Ground School (8.0 Hrs.)

- Subjects

- NVG Introduction, Emergency Procedures and Limitations, Aero-medical Subjects, Night Terrain Interpretation and Night Mission Planning.

- Critical Topics

- NVG Adjustment Procedures.
- NVG Limitations.
- Distance Estimation and Depth Perception.
- Meteorological Conditions (IMC Avoidance).
 - Indications of Restrictions to Visibility.
- Crew Endurance.

- Crew Coordination

- A safety multiplier with any form of flight.

Training Issues

- **Flight Training (6.0 – 7.5 Hrs.)**
 - **Basic Maneuvers**
 - Hovering, Hovering, Hovering
 - Normal Takeoffs and Approaches
 - Max Takeoffs and Steep Approaches
 - **Unimproved Areas (Confined Area Operations)**
 - Takeoffs and Approaches
 - Slopes and Quick-stops
 - **Emergency Procedures**
 - NVG Failure
 - Inadvertent IMC
 - Running Landings
 - Autorotations (At a Hover and at Altitude)

SUMMARY

- **Operating at night is safer with NVG's.**
- **Less expensive then thought.**
- **Old myths are not true.**
- **Training is the key.**