

1. Had the National Airlines chief loadmaster consulted the required manufacturers' weight and balance manuals, he could have determined that the intended load of five vehicles could not be properly secured in the airplane in accordance with the tall rigid cargo safety requirements; at most, only one mine-resistant ambush-protected all-terrain vehicle could be transported.
2. Although the flight crewmembers and the loadmaster were aware that the cargo moved during the previous flight, they did not recognize that this indicated a serious problem with the cargo restraint methods.
3. The airplane's loss of pitch control was the result of the improper restraint of the rear mine-resistant ambush-protected all-terrain vehicle, which allowed it to move aft through the aft pressure bulkhead and damage hydraulic systems Nos. 1 and 2 and horizontal stabilizer drive mechanism components to the extent that it was not possible for the flight crew to regain pitch control of the airplane.
4. There is no evidence that an explosive device or hostile acts were factors in this accident.
5. Although the loadmaster did not follow National Airlines' procedures for securing the special cargo load, the procedures were deficient to the extent that, if followed, they could not have enabled him to properly load and restrain a special cargo load in accordance with the manufacturer and supplemental type certificate holder requirements.
6. Although National Airlines provided the accident loadmaster with initial and recurrent training, this training was deficient to the extent that it could not have provided him the knowledge and skills necessary to properly load and restrain a special cargo load in accordance with the manufacturer and supplemental type certificate holder requirements.
7. The certification of personnel responsible for ensuring the proper loading, restraint, and documentation of special cargo loads, including requirements for their procedures, training, and duty time and hour limitations, would help ensure that these personnel properly perform their safety-critical duties.
8. The Federal Aviation Administration did not provide adequate oversight to ensure that the National Airlines cargo operations manual reflected the correct information and guidance from the airplane and cargo handling system manufacturers that specified how to safely secure the cargo.
9. The lack of clear guidance regarding Federal Aviation Administration inspector responsibility for the oversight of cargo handling personnel resulted in minimal oversight of these areas at National Airlines and enabled the persistence of critical safety deficiencies.
10. When circumstances such as Federal Aviation Administration inspector travel restrictions or resource shortfalls result in the repeated deferral of required surveillance tasks, an alternative method of risk reduction could help mitigate risks until the surveillance tasks can be completed.