A further role for government is to be found in the funding, if not always the provision, of education. This would include such federal programs as Head Start for preschoolers; school lunches in primary schools; apprentice and school-to-work programs in high schools; and direct loans, scholarships and social service programs to facilitate enrollment in colleges and other post-secondary institutions. Government would appear needed to support the basic research on which progress in new technology and health maintenance ultimately depend. And efforts such as the earned-income tax credit and job training to get more people to work and off pure government handouts are also viewed by many, including President Clinton, as very much in order.

Republicans would generally reduce or eliminate these programs and cut taxes, most heavily for those with high incomes. They claim that this would help the economy and hence ultimately make better off the poor and less fortunate who have only been trapped in their worsening positions by the government programs designed to help them.

The current Republican revolutionaries would reduce or eliminate government programs that have been developing since the New Deal of the 1930s. To the new revolutionaries these programs injure the workings of a free-market economy that has contributed so much to our well-being. But to many others they are indispensable both to stable economic growth and the social compact on which our economic system and our society depend.

What we've been witnessing in these heated political battles is not just posturing or boys fighting in the schoolyard. There are fateful issues involved. But it is not the deficit, stupid.

PARTIAL-BIRTH ABORTION BAN ACT

Mr. BYRD. Mr. President, the Senate voted on November 8 to commit H.R. 1833, the partial-birth abortion ban bill, to the Senate Judiciary Committee for a hearing and, within 19 days, to report the bill back to the full Senate. The Judiciary Committee held a hearing on this measure on November 17. H.R. 1833 came before the Senate again yesterday, December 7, and I voted against this measure.

This is an extremely difficult issue, one which I have wrestled with a great deal. However, after carefully listening to the debate and following the Judiciary Committee hearing, I have concluded that this is a matter in which Congress should not impose its judgment over that of the medical community.

H.R. 1833, the Partial-Birth Abortion Ban Act, would criminalize a medical procedure, the partial-birth abortion. Physicians have expressed concern that the bill does not use recognized medical terms in defining partial-birth abortion, thus, creating uncertainty as to what procedures would be banned. It is my understanding that the American College of Obstetricians and Gynecologists oppose this bill. Beyond the concern about the terminology used to define the procedure, the college also expressed concern that Congress is attempting to impose its judgment over that of physicians in medical matters.

The Senate Judiciary Committee hearing had a panel of physicians testify who could not agree about this procedure. If doctors are uncertain, I do not believe it is a good idea for Congress to ban this procedure in all instances. Although an exception for the life of the mother was adopted during this debate, the health of the mother is not taken into account. It is my understanding that this procedure, in some circumstances, may be the least risky option for a woman and may be necessary to preserve the health and the future fertility of the woman.

Also testifying before the Senate Judiciary Committee were women who had this procedure. I admire these women for coming forth to relate their painful and personal experiences so that the Senate could better understand the impact of this legislation. These women were faced with the necessity of terminating their very much wanted pregnancies because their unborn babies suffered severe abnormalities. Their physicians decided that in their tragic circumstances, this procedure was the safest option.

No woman should have to face this situation. But unfortunately and tragically pregnancies do not always to as planned. Severe fetal abnormalities or the threat to a woman's life or health that may be exacerbated by pregnancy sometimes lead to the need for women and their families to make difficult decisions. These are tragic decisions women and their doctors should make without the interference of the Congress. I sympathize greatly with the women and families who unfortunately have had to face these decisions. If we enact this legislation, aren't we making the plight of women who may face this agonizing situation in the future that much more difficult by removing what may be the safest option as determined by the woman and her doctor?

In addition, the Supreme Court has ruled that States can ban, restrict, or prohibit post-viability abortions except in cases where the woman's life or health is a jeopardy. In fact, 41 States have chosen to restrict abortions after viability. I believe this issue is best left to States to regulate.

Given the uncertainty in the medical community surrounding this procedure and the unprecedented step this bill takes in criminalizing a medical procedure, I voted against H.R. 1833. I do not believe that the Federal Government should be usurping the powers of the States in such matters. Nor do I believe that politicians should be involved in private decisions between patients and their doctors regarding the appropriate medical treatment of serious heart-rending and critical health matters.

THE BAD DEBT BOXSCORE

Mr. HELMS. Mr. President, the skyrocketing Federal debt is now slightly in excess of $11 billion shy of $5 trillion.

As of the close of business Thursday, December 7, the Federal debt—down to the penny—stood at exactly $4,989,071,101,377.59 or $18,938.60 on a per capita basis for every man, woman, and child.

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Mr. Kalbaugh, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting a withdrawal and a nomination which was referred to the Committee on the Judiciary.

(The nominations received today are printed at the end of the Senate proceedings.)

EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, which were referred as indicated:

EC–1669. A communication from the Chief of Legislative Affairs, Department of the Navy, transmitting, pursuant to law, notice relative to renewing a lease; to the Committee on Armed Services.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. MURKOWSKI, from the Committee on Energy and Natural Resources, with an amendment in the nature of a substitute and an amendment to the title:

S. 907. A bill to amend the National Forest Ski Area Permit Act of 1986 to clarify the authorities and duties of the Secretary of Agriculture in issuing ski area permits on National Forest System lands and to withdraw lands within ski area permit boundaries from the operation of the mining and mineral leasing laws (Rept. No. 104–183).

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first and second time by unanimous consent, and referred as indicated:

By Mr. MCCAIN:

S. 1461. A bill to amend title 49, United States Code, relating to required employment investigations of pilots; to the Committee on Commerce, Science, and Transportation.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. MCCAIN:

S. 1641. A bill to amend title 49, United States Code, relating to required employment investigations of pilots; to the Committee on Commerce, Science, and Transportation.

THE AIR TRANSPORTATION SAFETY IMPROVEMENT ACT OF 1995

● Mr. MCCAIN. Mr. President, I introduce the Air Transportation Safety Improvement Act of 1995, which will go a along way to ensure the continued safety of those who use the nation's air transportation system. Clearly, this legislation complements current more comprehensive efforts to improve the Federal Aviation Administration and to enhance the safety and efficiency of the air traffic management system. In specific, this bill will permit the transfer of relevant employment and training records to prospective employers when an individual has applied for a position as a pilot.

The bill necessarily focuses on encouraging and facilitating the flow of information between employers so that safety is not compromised. In addition, to ensure that the burden of this legislation does not fall on employers and the legal system, when a transfer is requested and complied with, both the employer who turns over the requested records and the prospective employer who receives them will be immune from lawsuits related to the transferred information. Complete immunity is critical—without it, the legislative cannot achieve its objective of making it a common practice of prospective employers to research the experience of pilots and to learn significant information that could affect air carrier hiring decisions and, ultimately, airline safety.

After reviewing information about certain investigations and recommendations of the National Transportation Safety Board, I have become very concerned about deficiencies in the pre-employment screening of pilots. Right now, the FAA requires airlines only to determine whether a pilot applicant has a pilot license, to check the applicant's driving record for alcohol or drug suspensions, and to verify that person's employment for the five previous years. Yet, the FAA does not require airlines to confirm flight experience or how a pilot applicant performed at previous airlines. The NTSB, however, after studying certain airline accidents that were determined to be caused by pilot error, has recommended three times since 1988 that airlines should be required to check information about a pilot applicant's prior flight experience and performance with other carriers.

Compounding my concern about the insufficient sharing of pilot performance records among employers is that in the near future, there may be a shortage of well-qualified U.S. airline pilots because the military, which in the past has regularly trained the vast majority of airline pilots, will be training fewer of them. This will happen at the same time that the demand for pilots at U.S. major and regional carriers increases. Since many future pilots will not have experienced rigorous and reliable military aviation training, the ability of prospective employers to have access to records from previous employers will be even more critical to airline and passenger safety.

Safety in our nation's air transportation system is paramount. I believe this bill will not only encourage employers to make more thorough background checks of the pilots they hire, but will also enhance safety.

Mr. President, I ask unanimous consent that this legislation and certain newspaper articles dealing with this matter be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 1461

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 44936 of title 49, United States Code, is amended by adding at the end thereof the following:

''(f) RECORDS OF EMPLOYMENT.—

''(1) IN GENERAL.—An air carrier or foreign air carrier receiving an application for employment from an individual seeking a position as a pilot may request and receive records described in paragraph (2) relating to that individual's employment from any person who has employed that individual at any time during the 5 years preceding the application.

''(2) RECORDS TO WHICH SUBSECTION APPLIES.—The records referred to in paragraph (1) are—

''(A) the personnel file of the individual;

''(B) any records maintained under the regulations set forth in—

''(i) section 121.683 of title 14, Code of Federal Regulations;

''(ii) paragraph (A) of section VI, appendix I, part 121 of title 14, Code of Federal Regulations;

''(iii) section 125.401 of title 14, Code of Federal Regulations;

''(iv) section 127.301 of title 14, Code of Federal Regulations; and

''(v) section 135.63(a)(4) of title 14, Code of Federal Regulations; and ''(C) any other records concerning—

''(i) the training, qualifications, proficiency, or professional competence of the individual;

''(ii) any disciplinary action taken by the employer with respect to the individual; and

''(iii) the release from employment, resignation, termination, or disqualification of the individual.

''(3) RIGHT TO RECEIVE NOTICE AND COPY OF ANY RECORD FURNISHED.—An individual whose employment records have been requested under paragraph (1) of this subsection—

''(A) shall receive written notice from each person providing a record in response to a request under paragraph (1) of the individual's right to receive such copies; and

''(B) is entitled to receive copies of any records provided by the individual's employer or a former employer to any air carrier or foreign air carrier.

''(4) REASONABLE CHARGES FOR PROCESSING REQUESTS AND FURNISHING COPIES.—A person who receives a request under paragraph (1) may establish a reasonable charge for the cost of processing the request and furnishing copies of the requested records.

''(5) STANDARD FORMS.—The Administrator shall promulgate—

''(A) standard forms which may be used by an air carrier or foreign air carrier to request records under paragraph (1) of this subsection; and

''(B) standard forms which may be used by any employer receiving a request under paragraph (1) for records to inform the individual to whom the records relate of the request and of the individual's right to receive copies of any records provided in response to the request.

''(6) REGULATIONS.—The Administrator may prescribe such regulations as may be necessary—

''(A) to protect the personal privacy of any individual whose records are requested under paragraph (1) of this subsection and to protect the confidentiality of those records;

''(B) to limit the further dissemination of records received under paragraph (1) of this subsection by the person who requested them; and

''(C) to ensure prompt compliance with any request under paragraph (1) of this subsection.

''(g) LIMITATION ON LIABILITY; PREEMPTION OF STATE LAW.—

''(1) LIMITATION ON LIABILITY.—No action or proceeding may be brought by or on behalf of an individual who has applied for a position described in subsection (a)(1) of this section against—

''(A) an air carrier or foreign air carrier with which the individual has filed such an application for requesting the individual's records under subsection (f)(1);

''(B) a person who has complied with such a request; or

''(C) an agent or employee of a person described in subparagraph (A) or (B) of this paragraph

in the nature of an action for defamation, invasion of privacy, negligence, interference with contract, or otherwise, or under any State or Federal law with respect to the furnishing or use of such records in accordance with subsection (f) of this section.

''(2) PREEMPTION.—No State or political subdivision thereof may enact, prescribe, issue, continue in effect, or enforce any law, regulation, standard, or other provision having the force and effect of law that prohibits, penalizes, or imposes liability for furnishing or using records in accordance with subsection (f) of this section.''.

[FROM THE NEW YORK TIMES, NOV. 10, 1995]

SAFETY BOARD URGES GOVERNMENT TO MONITOR PILOTS' JOB RECORDS

(By Matthew L. Wald)

WASHINGTON, November 9.—The National Transportation Safety Board recommended today that the Government keep employment records on pilots to keep bad ones from jumping from job to job.

The recommendation came after the board blamed the crash of an American Eagle turboprop last November on pilot error; the pilot had been hired a few days before he was to be dismissed by his previous employer, but American did not know that.

Currently, airlines do not share such data out of concern that a pilot denied employment because of unfavorable information provided by a former employer can sue.

''We can't permit liability to drive safety issues,'' James E. Hall, chairman of the safety board, said in a telephone interview today. ''Somebody has got to take a step forward to do what's in the public interest.''

But the board said privacy questions must be worked out. Moreover, the Federal Aviation Administration, which the safety board wants to compile the data, was reluctant to act without Congressional authorization.

The organizations representing the commuter airlines and the major carriers both expressed support yesterday, although a pilots' union said it objected to such a move.

Last month the safety board concluded that American Eagle flight 3372, a twin-engine turboprop on the way to Raleigh-Durham International Airport from Greensboro,

N.C., crashed after the pilot, Michael P. Hillis, became confused about whether the left engine had stopped and failed to focus on flying the airplane. Mr. Hillis. who was killed in the crash, along the co-pilot and 13 of the 18 passengers, had been on the verge of dismissal from Comair, a smaller carrier, when he was hired by American.

American said it never asked Comair about Mr. Hillis's record because it was unlikely that the airline would divulge anything beyond the dates of employment and the kind of equipment that the pilot flew.

The safety board recommended that the airlines and the F.A.A. develop a standardized report on ''pilot performance in activities that assess skills, abilities, knowledge, and judgment.'' The data would be stored by the F.A.A., and with a pilot's permission, could be given to potential employers.

Walter S. Coleman, president of the Regional Airline Association, which represents commuter carriers said in a statement that his group ''supports the intent'' of the Safety Board's recommendations.

At the Air Transport Association, which represents the major carriers, Tim Neale, a spokesman, said, ''I don't think this is going to cause problem for the airlines.''

The Air Line Pilot's Association said that any deficiencies in Mr. Hillis's performance should have been obvious because he had been with the airline for four years by the time of the crash. The union also said test results should not be shared among airlines because the tests were not standardized. It called for more training of pilots.

[From USA Today, Sept. 29, 1995]

PUBLIC DESERVES MORE FROM FAA WATCHDOG

How long does it take to learn from your mistakes? At the Federal Aviation Administration, guardian of public air safety, the answer is a disastrously long time.

In a three-part series concluded Thursday, USA TODAY reporters Julie Schmit and John Ritter reveal that the system for assuring pilot competence is dangerously flawed. In fact, it has contributed to 111 deaths, all but one on small airlines, which have less-experienced pilots.

At the heart of the problem is the FAA. The record shows the FAA was warned repeatedly about flaws in pilot testing and hiring, that it recognized the flaws and that it was flagrantly ineffective in fixing them.

One telling example:

On Nov. 15, 1987, 28 passengers and crew died when Continental Flight 1713 crashed on takeoff from Denver. National Transportation Safety Board investigators blamed the crash on bad flying by co-pilot Lee Bruecher. Unbeknown to Continental, Bruecher had been fired from one airline. He'd also flunked pilot tests and had been cited nine times for motor vehicle violations, a red flag for risky pilots.

The NTSB's conclusion: Airlines should be required to check previous employer records of prospective pilots, including test scores, training results, performance evaluations and disciplinary actions.

The FAA's response: No. Its rationale: Benefits from such regulatory change would not justify enforcement costs.

Eight years and six pilot-error airline crashes later, airlines still were not required to verify applicants' flight experience.

That set the stage for crash 7, an American Eagle accident last December in North Carolina explored in detail by the USA TODAY reporters. They found that the pilot, Michael Hillis, was widely known for indecisiveness. Documents showed he'd failed FAA checkrides, and his judgment in critical situations had been found unsatisfactory by previous employers. But the airline didn't know all that until after Hillis ran his plane into trees at 200 mph, killing 15, including himself.

Another pilot-safety flaw emerged from the reporters' research, as well.

Had the FAA required more crew-coordination training, Hillis' co-pilot, who'd never met his captain before the flight, might have been able to override his errors. The NTSB has warned the FAA since 1979 of the critical need for improved crew-coordination training. But the FAA failed to act until this year.

All this points to a problem larger than pilot error. Again and again, the NTSB has told the FAA what's broken in aviation and how to fix it. Yet critical improvements have stalled—and not just because of incompetence or bureaucratic sluggishness.

The FAA is hamstrung by a conflicting mandate. It is charged with both protecting safety and promoting air travel.

So while it can mandate safety measures, it must first weigh the cost-benefit wisdom of its changes. The result: too little, too late in safety improvements.

There are recent signs of progress with new FAA rules for enhanced pilot training and renewed interest in background checks. But even these are half-measures, requiring only some airlines to comply and making some rules voluntary. And this comes as a pilot shortage is approaching.

If ever a lesson is to be learned from aviation accidents, it is that timidity has no place in safety. The NTSB knows that. It's time the FAA did as well.

Regional airlines caught in a bind. Business is booming for small airlines, but their supply of military-trained pilots is down. And there's little incentive for prospective pilots to spend four years and $70,000 for a commercial pilot's license to get a job that starts at $14,000 per year. Meanwhile, starting jobs at the major airlines pay twice that and can reach more than $100,000 after 10 years.

Military trains fewer pilots: 1992, 3,742; 1996, 2,678(1).

Regional airline business soaring. Passengers (in millions): 1984, 26; 1995, 60(1).

Ranking salaries. Average second-year pay for a regional airline co-pilot compared to other professions:

Secretary, $19,100.
Phone operator, $19,100.
Data entry, $17,750.
Co-pilot, $15,600.
Receptionist, $15,400.
Bank teller, $14,600.

[From USA Today, Sept. 28, 1995]

PILOT PERFORMANCE: TOP OFFICIALS RESPOND

Q: American Eagle Capt. Michael Hillis washed out at his first airline, Comair. Eagle hired him without knowing that. Last year, he crashed a plane, killing himself and 14 others. Should airlines share records of pilot training and performance?

Pena: That was a very upsetting (crash). We are working with Congress to get legislation passed to allow airlines to share (pilot performance) information, and we will support such legislation.

Q: What do you say to people who are shocked that a pilot who failed at one airline could get hired at another?

Broderick: I am incensed, too, every time an accident happens. We work 24 hours a day trying to make this system a zero-accident system. I think we've got it to where it is the best in the world. It is still not good enough, and every time the system fails, it is extremely frustrating to all of us. We want to do whatever it takes to make sure that failure never happens again.

Q: Did the system fail in the American Eagle crash?

Broderick: The system failed because a plane crashed and people lost their lives.

Q: Does that mean the system doesn't always identify weak pilots?

Broderick: No. It points out where they're weak so we can train them in areas where they need it. Success isn't in getting rid of people. Success is having qualified people on the flight deck. If the system is such that you fail (and) you're out, it couldn't work.

Q: In the past 12 years, there have been 16 fatal accidents in 15- to 19-seat planes. In five of those, the FAA was cited for inadequate supervision of the airline. Is that acceptable?

Pena: No. Absolutely not. We're going to continue to press to improve the level of safety for smaller planes.

Q: But what are you doing to hold the FAA to a higher standard?

Pena: We have a new management team in place that is very focused on this issue. And I am very focused on this issue. We've changed our attitude. We've sent a strong message to everybody to think of safety differently than the way it was viewed in the past, which was ''accidents will happen.'' No one would say that, but that was the unstated assumption. Our attitude now is ''no more accidents.'' Our thinking now is perfection.

Q: What have you done to make that reality?

Pena: We've added more inspectors. We've reached an agreement, which was a big breakthrough, with the airlines. We can now review all their flight data recorders (the ''black boxes'' on planes that record pilot conversations). In some cases, they show mistakes made by pilots. We can take that information and share it with all pilots to show (that) that was the wrong thing to do, here is what should have been done. We've also pushed for a higher level of safety on regional airlines. (Next year, all regionals will have to meet many of the same safety standards already in use at large regional and major airlines.)

Q: Safety investigators have cited inadequate pilot training as a factor in two fatal crashes since 1985. In one, the FAA had allowed an airline to reduce training below the FAA's minimum standard. Why do you set minimum standards and then allow airlines to go below them?

Hinson: Any exemption we grant is only done when it is an equivalent level of safety. In regulatory law, you write a regulation that focuses on what you're trying to accomplish but realizes there is more than one path. It takes five years to build an airplane. It takes three years to redesign an airline's training program. We cannot change our regulations every six months. One of the purposes of having exemptions is to allow air carriers to take advantage of new technology within the existing framework so we don't have to say to them, 'I'm sorry, the rule doesn't allow this.'

Q: The FAA is supposed to regulate and promote aviation. Aren't those conflicting responsibilities?

Q: Hinson: No. We are to provide a safe aviation environment. In that context, promotion means we should have laws giving us authority to set standards, impose penalties and provide enforcement. The most aggressive form of promotion is to have the confidence of people who use the system.

Q: Before the FAA passes a new regulation, it must weight the cost of it to the airlines.

Q: Hinson: That's true. We could provide a regulatory environment that was so strict and so punitive that people would ask, 'Why go into that business?' We could say (planes) must have six engines, four pilots instead of

two. We don't do that. We have 17 cost-benefit laws that we have to answer to. The National Transportation Safety Board and the other oversight groups can have opinions without regard for cost. We can't.

Q: One criticism is that it takes repeated accidents before the FAA acts. What's being done?

Q: Hinson: To some degree that is a fair criticism. It results from a propensity of our people to be extremely cautious and it comes back to the requirement of cost-benefit analysis. We are beginning to see a reduction in the processing time of regulations. One of my charges is to create more sense of urgency in that arena.

[From USA Today, Sept. 28, 1995]

EXPENSE SOMETIMES STOPS FAA FROM ORDERING SAFETY IMPROVEMENTS

(By John Ritter and Julie Schmit)

The FAA rejects dozens of changes it deems to costly or burdensome to airlines, even if other experts think they're important to safe airliner operation.

Sometimes the FAA repeatedly turns down a National Transportation Safety Board recommendation—under industry pressure, critics say—only to accept it later after more crashes.

December's American Eagle crash near Raleigh, N.C., is an example. Records show the pilot had been forced to resign at one airline. But Eagle hired him unaware of his poor record.

Three times since 1988, the NTSB had urged tougher pilot background checks, including verifying flight, training and disciplinary records and FAA violations. But the FAA says enforcing a new regulation would be too costly and leaves such checks up to the airlines.

There are other examples:

The NTSB urged ground-proximity warning devices on planes in 1986. An FAA rule requiring them took effect last year, but loopholes will delay full compliance until 1996.

After a 1993 Express II accident near Hibbing, Minn., the NTSB said the device would have given pilots 33 seconds' notice they were too close to the ground—plus an urgent ''pull up'' warning 21 seconds before—time enough to avoid the crash, which killed 18.

Fatal runway crashes in Los Angeles, Detroit and Atlanta within a year led the NTSB in 1991 to urge the FAA to speed up installing ground radar.

The FAA moved quickly but delays persisted. In November, a TWA MD–80 took off from St. Louis while a Cessna was on its runway. The jet sheared the top off the smaller plane, killing two pilots. The MD–80 passengers escaped.

Investigators found that the FAA modifications had delayed St. Louis' radar. The NTSB then asked for a schedule for remaining airports and held a hearing to pressure the FAA. Even now, ''We don't expect them to have the system fully installed until 1999,'' says Barry Sweedler, director of the NTSB's safety recommendations office.

In 1979 the NTSB began urging a new kind of training to make cockpit crews work together better. And although the majors and some regionals now teach Crew Resource Management (CRM), it's not uniform or required.

But most crashes involving pilot error can be traced to CRM deficiencies—faulty communication or poor coordination between pilots.

New FAA rules this fall will require CRM industrywide for all pilots flying planes with 10 or more seats. But it won't be pass-fail training—pilots whose CRM skills are weak won't necessarily be pulled from the cockpit.

[From USA Today, Sept. 28, 1995]

PILOT ERROR: SOLUTIONS, BETTER REGULATIONS, SAFER SKIES

Problem: Pilot Supply 1. Provide public funding for pilot training to ensure high quality. The Air Force spends $533,000, on average, to train one pilot. It exposes pilots to the latest aircraft and computer technologies. U.S. flight schools, which rely almost completely on tuition, can't afford such training. Most student pilots train in single-engine planes quite unlike those flown by regional and major airlines. Who must act: Congress, FAA. 2. Provide pilot candidates with more financial assistance, including guaranteed student loans and scholarships. That would ensure that the industry gets the best applicants, not just those who can afford the training. The cost of a commercial pilot license and four-year degree is about $70,000. Most new pilots find that it takes five years, or more, to get a job that pays more than $30,000 a year. Who must act: Congress, FAA. 3. Require airline pilots to have four-year degrees. Many major airlines used to require a four-year degree. Now, most list it as a preferred qualification. The military still requires it of pilot applicants. Requiring bachelor's degrees would help ensure that pilots have the ability to understand today's sophisticated planes. Who must act: FAA, airlines. 4. Have examiners chosen at random. Make it impossible for pilots and student pilots to choose their own examiners for licensing and aircraft certification tests. The current system is open to abuse by examiners who give easy or short tests. The more tests they give, the more money they make. Who must act: FAA.

Problem: Pilot Hiring 5. Require tougher background checks of pilot applicants. Airlines are required to verify an applicant's pilot license and work history for the previous five years. They also must check driving records for alcohol or drug convictions. The FAA should require airlines to verify applicants' flight experience, check FAA records for accidents or violations and check any criminal records. The National Transportation Safety Board has suggested tougher background checks three times since 1988—each time after a fatal accident. Who must act: Congress, FAA. 6. Require airlines to share training records. These may reveal recurring weaknesses on such things as judgment and decision-making, which wouldn't show up in FAA records. Today, the records aren't shared because airlines fear invasion-of-privacy lawsuits from former employees. Who must act: Congress, FAA. 7. Set minimum qualifications for new airline pilots. Currently, each airline sets its own standards, which go up and down based on the supply of applicants. When supplies are tight, airlines often hire pilots who would not be considered when applicants are plentiful. Who must act: FAA.

Problem: Training 8. Tighten monitoring of exemptions and waivers to the FAA's minimum training standards. Most major airlines now exceed the FAA's minimums because the airlines deem them too low. Even so, the FAA allows some regional airlines to shorten training programs if it is convinced their alternatives won't compromise safety. Waivers are given by regional FAA inspectors. There is no national database, which makes monitoring difficult. Who must act: FAA. 9. Speed up implementation of new techniques such as the Advanced Qualification Program. AQP requires airlines to train pilots as crews—rather than individually—which improves crew coordination, a key factor in many accidents. AQP also identifies marginal pilots sooner because pilots are tested more often throughout the training process instead of just once at the end. Who must act: FAA, airlines.

Problem: Testing 10. Require airlines to better monitor pilots who barely pass flight tests. Now pilots pass or fail. If they pass, they don't get more training. If they fail, they do. The system does not recognize that some pilots pass with ease while others struggle. Who must act: FAA, airlines.

Problem: Oversight 11. Encourage pilots to report unsafe pilots by requiring airlines and unions to establish and monitor reporting systems. Most airlines have union committees for this, but it's not an FAA requirement. Who must act: FAA, airlines. 12. Require the FAA to improve the quality of its own databases, which often are incomplete and inaccurate. The FAA has more than 25 databases collecting information on such things as failed pilot tests and pilot violations. The databases are supposed to help the FAA target inspections at high-risk airlines, but inspectors cannot rely on poor data. Who must act: FAA.

[From USA today, Sept. 28, 1995]

HOUSE SEEKS PILOT HEARINGS: AIRLINE RECORD-SHARING ''PART OF SAFETY EQUATION''

(By Julie Schmit and John Ritter)

The chairman of the House subcommittee on aviation Wednesday called for hearings on requiring airlines to share pilot performance records.

Record-sharing would prevent marginal pilots from moving from airline to airline without the new employer learning about past performance.

Rep. John Duncan, R-Tenn., responding to a USA Today investigative report, said if airlines won't start sharing records voluntarily, ''we will go for a legislative solution.''

Sen. John McCain, R-Ariz., Senate aviation subcommittee chairman, said airlines may have to be exempted from civil privacy suits. ''Safety is paramount, and we have to take whatever steps are necessary.''

''Lives will be saved,'' said Jim Hall, National Transportation Safety Board chairman. ''The flying public has the right to know airlines are doing all they can to ensure safety.''

Airlines are reluctant to share records because they say it opens them to privacy suits.

But government reports show that since 1987, 111 have died in seven crashes blamed on pilots' performance.

In some cases, those pilots had poor histories at other airlines, information their new employer did not have.

''We welcome the interest'' in Congress, said FAA administrator David Hinson. ''A pilot's record . . . is an important part of the safety equation.''

The Air Line Pilots Association, the USA's largest pilot union, wants airlines, the Federal Aviation Administration and unions to develop national standards to screen applicants.

Many of the several dozen pilots who called USA TODAY about this week's three-part series said too many marginal pilots continue flying.

[From USA Today, Sept. 27, 1995]

THE PILOT WHO CRASHED FLIGHT 3379

FIRST TIME AS A TEAM, PILOTS MADE MISTAKES

(By John Ritter and Julie Schmit)

A stall warning horn blared again. ''Lower the nose, lower the nose, lower the nose,'' copilot Matthew Sailor told Hillis. By now, the plane was rotating left. ''It's the wrong foot, wrong foot, wrong engine,'' Sailor said. Hillis, one of several pilots with troubling flight records, tried in the dark cockpit to control the plane. He pressed the wrong rudder pedal. The rotation worsened. Six seconds

later, the plane slammed into trees four miles from the runway at 200 mph.

December 13, 1994, an American Eagle Jetstream descends in darkness, rain and fog toward Raleigh-Durham Airport.

A light blinks on, warning of possible engine failure.

Two pilots, flying together for the first time, scramble to sort out what has gone wrong. Fifty seconds later, the twin-engine turboprop slams into woods west of Raleigh at 200 mph. Both pilots and 13 passengers die.

American Eagle officials believe the crew of Flight 3379 bungled a situation it was trained to handle. In November, the National Transportation Safety Board is expected to report—as it does in 7 out of 10 airplane accidents—that the pilots made mistakes. Almost certainly the NTSB will urge—for the fourth time in seven years—tougher background checks of the nation's airline pilots.

What is clear from the third fatal crash in a year involving a regional carrier—and the 18th in four years—is that the flight captain, Michael Patrick Hillis, was a marginal pilot who had managed to slip through the airline industry's elaborate safety net. Moreover, the crash puts under fresh scrutiny a decades-old, traditional-bound system of hiring and training airline pilots.

The young Eagle captain had no violations on his record. Hillis had never been in an accident. But he had failed tests and shown poor judgment at two airlines. He had struggled with landings easier than the one that confronted him out-side Raleigh. He was not, his fellow pilots made clear, a man they wanted to fly with in an emergency.

Shy, studious and unassuming, a quiet loner who found relationships difficult, Hillis, 29, did not fit the take-charge image of an airline pilot. An instructor who had him in a small ground-school class weeks before the accident couldn't remember him.

And throughout a five-year airline career, doubts had persisted about his flying abilities.

''He was very indecisive and very hesitant,'' says his pastor, the Rev. Robert D. Spradley. ''Unless he changed into something other than what we saw when he got in the cockpit, those emergency decisions must have been very difficult for Mike.''

William Gruber, a 20-year pilot at Embry-Riddle Aeronautical University, concludes after reviewing Hillis' career: ''I can't say I'd allow him to take command of an aircraft.''

Hillis survived in a system that should have weeded him out—a system of hiring, training and testing pilots that has no fail-safe mechanism to keep track of marginal performers, no way even to ensure that their records follow them from one job to the next.

Flight 3379 underscores the randomness of air travel: Pilots fly whole careers and never have an engine fail.

It underscores the contracts: The brief career of Hillis' co-pilot, Matthew Sailor, was an exceptional and full of promise as Hillis' was bumpy and unremarkable.

And it underscores the irony: On the eve of the fatal flight, Hillis was ready to quit American Eagle. He had even asked a friend about working at a Wal-Mart.

Most of all, Hillis' story underscores the imperfections of the airline pilot system.

Eagle managers say Hillis was competent because he passed every test he had to pass. ''We don't know any way we could have caught this guy,'' says Robert Baker, vice president of AMR, parent of American Eagle and American Airlines.

But a USA Today investigation reveals a less reassuring picture of Hillis' hiring and advancement. Eagle never learned the real reason he wanted to leave his first airline for a lower-paying job at a second one.

Hillis was brought on board quickly by Eagle, an expanding carrier eagerly hiring pilots. He didn't move up Eagle's applicant pool gradually as Sailor, hired three years later, did.

And, the preliminary crash report shows, when Hillis failed an FAA check-ride—a key benchmark—Eagle ignored its own rules and let the same examiner retest him.

In his Eagle file, Hillis had no evaluations by senior captains he flew with his first year—a tool many airlines, but not Eagle, use to identify poor performers.

He kept advancing, as he had since his first solo flight not long after high school in 1984—from small single-engine planes to twin engines, to planes that carried a few passengers to planes that carried more.

But once he hit the airlines, troubles cropped up. When he couldn't cut it in his first job, as a first officer at Comair, a Cincinnati-based regional airline, Comair got rid of him. That alone would have ended many careers, but not this one.

Hillis' problems started in the first check-ride.

Hillis joined Comair as a co-pilot trainee in January 1990, after flying four years for a small Memphis freight operation. Weeks after arriving at Comair, he had his first FAA check-ride and bombed.

In a check-ride, an examiner tests a pilot's skill on takeoffs, approaches and landings. Hillis flunked three of four landings, three of nine instrument procedures and one of five takeoffs. Worse, he got what pilots liken to a scarlet letter: ''unsatisfactory'' on judgment.

''It means the examiner believes the guy shouldn't be flying,'' says Robert Iverson, a longtime Eastern Airlines pilot and former KIWI Airlines top executive. ''It is a subtle way to pass that along . . . to say, 'Hey management, you better wake up.' ''

Instead, Hillis got more training and passed his retest two days later. But in his early flights, captains flying with him commented that his landings were still weak.

In April 1990, Comair Capt. Mitchell Serber rated Hillis in the lowest fifth of pilots on flight skills, but above average on willingness to learn. Serber also found him impatient, a ''very high-strung person . . . who gets upset with his performance to the point it distracts him.''

He had ''functional knowledge of his duties'' but not a good understanding of the plane. After a month in the cockpit with Hillis, Serber rated ''his overall performance as weak.'' He certainly wasn't ready to be a captain, Serber felt. He should stay a first officer at least a year.

On evaluation forms that asked if they would be comfortable flying as a passenger with Hillis, Serber and two other captains checked ''no.''

But by December, one of those captains found him ''moody and unpredictable'' and urged dismissal. Serber, after talks with Comair chief pilot Roger Scott, agreed. He had never recommended firing a pilot.

Senior pilots warned about Hillis' flight weaknesses.

Serber was worried, he told safety investigators after the crash, that Hillis would get tunnel vision in an emergency. His timing was off: ''Mike was frequently behind the airplane.'' He often lost situational awareness. He would ''make large abrupt corrections, mostly on instrument approaches.'' These deficiencies would all come into play in the crash.

But even senior pilots' warnings weren't enough to get Hillis fired. He was allowed to resign, on Jan. 3, 1991, after less than a year at the airline. Comair won't discuss details, but vice president K. Michael Stuart says, ''Our system at a very early point determined that there was a problem and we took care of it.''

Took care of it to a point. Unknown to Comair, in October Hillis had applied for a job at Nashville Eagle, a regional carrier flying under American Eagle's logo. In an application letter he said he wanted to return to Tennessee.

On paper, he was a dream candidate: 2,100 flight hours, above the 1,500 Eagle requires. And as a working airline pilot, he had had more training than most. ''We naturally assume they know what they're doing,'' says American's Baker.

Eagle officials had no idea Hillis was on thin ice at Comair. They sent Comair a questionnaire they send all previous employers. Hillis even authorized Comair in writing to furnish information. One of the questions was, ''To what degree was this person's job performance satisfactory?''

Comair didn't send the form back, Eagle executives say. Rarely will an airline release information about a pilot. Comair says it provides only dates of employment. Eagle has the same policy. So do many companies outside the aviation industry. They won't risk invasion of privacy and defamation suits from ex-employees.

''Sure, we'll ask for more,'' says former Eagle president Bob Martens, ''but we don't get it for the same reason we don't give it out: We're subject to lawsuits from individuals.''

But privacy lawyers say there's no liability if the information is true. ''It's a phobia companies have,'' says Robert Ellis Smith, a Providence, R.I., privacy lawyer. ''I call it a conspiracy of silence.''

But not by all. Some airlines won't hire without information from previous employers. They want to know: Would you hire this person again? ''If we don't get a response to that, we don't hire,'' says William Traub, United Airlines vice president.

Hiring without knowing how well a pilot performed elsewhere worries safety experts. Three times since 1988, the NTSB has urged the FAA to require airlines to do detailed background checks before they hire and to provide the records of their former pilots when another airline requests them. The FAA has said enforcing such regulations would be too costly.

But since December's crash, FAA officials are considering ways to require carriers to share information.

American officials, in hindsight, acknowledge the value of sharing previous employment records. They want the FAA or Congress to mandate it. ''We're already doing it with drug and alcohol testing,'' Baker says. ''We're required by law to pass that information on.'' The information goes into an FAS database, which airlines can access.

But when Hillis applied, Eagle relied—as it still does today—on its own screening and training to spot unworthy pilots.

In that process, senior captains grill applicants on cockpit situations. A security agency investigates gaps in work history. Driving records are examined. There's a flight test in an aircraft simulator and a medical exam, which, like those at most airlines, exceeds FAA requirements.

Hillis went through his screening on Oct. 24, 1990, and passed. But there should have been concern. He lacked two qualifications Eagle prefers in its pilots: a college degree and an airline transport pilot certificate, the highest class of license.

In a Cessna simulator, Hillis flew adequately, and evaluator Sam White saw ''very good captain potential.'' But White also noticed that Hillis leveled off too low after descending form cruise altitude, and was slow to correct the mistake.

When asked if he had ever been fired or asked to resign from a job, Hillis could honestly answer no. It wasn't until two months

later that Comair would force him out. There's no record that Eagle asked him during the screening about his work there.

Jennings Furlough, an Eagle flight standards manager who interviewed Hillis, pronounced him a ''very good candidate.'' On Jan. 7, 1991, four days after leaving Comair, he began first officer training in a 19-passenger Jetstream turboprop.

Co-pilot Sailor came from a different flight background:

As Hillis started a new job, the co-pilot who died with him in the crash, Matthew Sailor, was beginning his final semester in aeronautical studies at the University of North Dakota in Grand Forks, one of the top collegiate aviation programs.

Over the next two years, Sailor, 22, would build a solid resume flying as an instructor pilot to gain hours. ''He was very proficient, one of the best we've had,'' says Joe Sheble, owner of Sheble Aviation in Bullhead City, Ariz., where Sailor earned advanced pilot and instructor ratings and spend hundreds of hours teaching students how to handle engine failure. ''He was probably as comfortable flying with one engine as two,'' Sheble says.

Eagle hired Sailor in December 1993, two years after he applied. He had both the college degree and top pilot certificate Hillis had lacked. In contrast to Hillis, two captains rated Sailor outstanding his first year, one of the airline's best first officers.

By the time Sailor was hired, Hillis had been with Eagle almost three years. His first year was unremarkable. A month into his initial training as a first officer, he passed an FAA check-ride in a Jetstream.

But in January 1992 he faced a crucial decision. Eagle's ''up or out'' policy meant he had to upgrade to captain when he rose high enough on the pilot seniority list or leave the company. ''We do not want people to make careers of being co-pilots,'' Baker says. Most airlines agree.

This was seven months after Command Airlines and Nashville Eagle had merged to form Flagship, one of the four American Eagle carriers. the new carrier was expanding rapidly.

It needed captains, and many first officers were upgrading. It's not clear how eager Hillis was, but he had no choice. In 1993, the policy changed, and Eagle began allowing first officers to defer upgrades up to a year.

Hillis began captain training in a Shorts 360, a 36-seat turboprop. Almost immediately, he had problems.

Watching him in a simulator, instructor Ray Schaub rated him unsatisfactory on two maneuvers. One was handling an engine failure. The other was for not executing a go-around of the airport after an engine failed on approach—the very situation he would confront before the crash. After 15 sessions Hillis passed his captain's check-ride and began flying out of Raleigh-Durham.

Less than four months later, he was back in a Jetstream when the number of Shorts captains was reduced. Now he had to recertify in the plane he'd flown before as co-pilot.

Records show once more he struggled, blowing an approach and flunking an FAA check-ride for the second time in his career. He got his second unsatisfactory on judgment.

At most airlines, including Eagle, two failed check-rides and two unsatisfactories on judgment would get a pilot kicked out. But Eagle knew nothing of the record at Comair.

Hillis' FAA examiner, Kevin Cline, told investigators he failed about 1 in 5 pilots, but only 2 percent or 3 percent got an unsatisfactory in judgment.

Hillis got 1.8 more hours of simulator training. Then Cline retested him, even though Eagle's policy is for another examiner to retest. Cline passed him the second time.

Assigned to Raleigh-Durham, Hillis flew uneventfully for the next two years. Eagle records show he passed eight checks from September 1993 to July 1994.

Rumors spread and one pilot balked at flying with Hillis:

If Hillis struggled during those tests, a record wouldn't have been kept at Eagle's training academy. That is Eagle's policy, approved by the FAA, so that instructors make no assumptions about how a pilot will perform.

But while Hillis was bearing up in the Eagle training academy's predictable environment, pilots he was flying with at Raleigh-Durham were talking about his indecisiveness and poor judgment.

On Nov. 18, 1994, Sandra O'Steen was scheduled to be Hillis' co-pilot from Raleigh to Knoxville, Tenn. She'd heard the rumors and told Raleigh base manager Art Saboski she didn't want to fly with Hillis—the only time she'd ever done that.

Saboski confronted O'Steen: Did she want to be judged on rumor? She said no and agreed to fly. During the flight, Hillis asked her about the rumors. Ignore them, O'Steen said.

Later, she e-mailed Saboski that the flight ''went by the book,'' signing off ''sorry for the fuss.'' She told investigators that Hillis' flying skills were OK, but he wasn't decisive.

Hillis was so upset about the rumors that he called Saboski at home on a Saturday. They met on Monday, and Hillis told his boss his reputation was being smeared. Saboski asked Hillis twice if he thought he needed more training. ''He pooh-poohed it,'' Saboski says. The meeting ended.

Saboski, who was supervising nearly 300 pilots, was torn. ''Rumors fly like crazy,'' he says. ''The pilots are a fraternity. But there's always a question in my mind as to whether there's truth in what's being said.''

Former Eagle president Martens agrees Saboski did not have enough information to act on.

Everyone's morale was low; layoffs were expected:

Three weeks later, on Dec. 10, American Eagle announced it was pulling out of Raleigh-Durham. Low morale plunged lower. Pilots were angry because they'd have to relocate or be furloughed. They'd been grumbling all year about their contract. They felt overworked and underpaid. Hillis shared the anger, and the announcement, along with the flap over rumors, apparently galvanized a decision to quit. He called in sick on the 10th, 11th and 12th.

''I tried to contact him. I knew something was going on,'' says Jody Quinn, a friend since Hillis had come to Raleigh two years before. He was, she says, not a hard person to figure out: ''Just a good ol' down-to-earth everyday person. But incredibly conscientious. On top of everything. Very together and organized.''

To Quinn and North Carolina State University students Brent Perry and Mike Parsons, who shared a house with him, Hillis was a dedicated churchgoer, a man who liked nature and photography. He studied a lot—especially airplane manuals and economics. He'd accumulated 42 hours at Memphis State University and was now taking courses at N.C. State.

''He'd bounced around from here to there to everywhere,'' Quinn says, ''and he just liked North Carolina and decided to stay. . . . He wanted to finally finish something, finish his degree. He wanted some roots.''

Hillis' mother, Theresa Myers of Wauchula, Fla., says her son loved flying but was uncertain about his future. ''I never wanted him to fly,'' she says. ''I wanted him to get a college degree, and in the end I think that's what he wanted, too.''

Spradley, his pastor, thought Hillis battled depression. ''He lacked self-confidence and personal strength, not just in his spiritual life but his social life as well. He didn't make friends easily and while he wanted them desperately, he didn't seem to know how to manage friendships.''

A job at Wal-Mart began to look appealing:

On Monday the 12th, Hillis studied for a final in his economics class. He and Parsons watched the Monday Night Football game, but Hillis was brooding about his future. He asked Perry how he like working at Wal-Mart and whether it had good benefits. ''He didn't like the idea of being unemployed,'' Perry says.

The two talked about the Raleigh-Durham hub closing, and Hillis said he was thinking of quitting that week. ''We prayed about it, prayed about what he hoped to do,'' Persons says.

Hillis' scheduled co-pilot the next day, Sailor, spent that night in a hotel near the airport. Based in Miami, Sailor was assigned temporarily to Raleigh-Durham. He had been an Eagle pilot just a year, but told friends he wasn't worried about being laid off.

He and Hillis—who had never met—were scheduled for a two-day trip Tuesday and Wednesday. They flew the initial 38-minute leg to Greensboro on Tuesday afternoon uneventfully.

As they took a break before flying the second leg, back to Raleigh, Hillis told airport service rep Sara Brickhouse, ''The company doesn't care about me.'' He was somber and unhappy, she told investigators.

Less than two hours later, as the Jetstream descended toward final approach into Raleigh, a small amber ignition light, the left one, flashed on. Hillis, flying the plane, said: ''Why's that ignition light on? We just had a flameout (engine failure)?''

Sailor answered: ''I'm not sure what's going on with it.'' Then Hillis declared: ''We had a flameout.''

The timing was bad. The plane, carrying a maximum weight load and its engines on idle, was quickly slowing down. It was at a point when Hillis should have been applying power to maintain minimum approach speed.

For 30 seconds, he and Sailor considered what to do as the plane stayed stable on its glide slope. They'd already lowered the landing gear and set the flaps for landing. Hillis decided to continue the approach and asked Sailor to back him up. Twice the cockpit recorder caught the sound of propellers out of sync.

Then Hillis made a fateful decision: He would abandon the approach, fly around the airport and try another landing. It would give them time to work the problem. Sailor said, ''All right.''

The plane by then had slowed dangerously. A stall warning horn blared, and Hillis called for maximum power in the good engine to gain speed. But he apparently failed to make two critical adjustments. Powering up the right engine would cause the plane to rotate left. To counter that, he should have raised the left wing and set full right rudder.

A stall warning horn blared again. ''Lower the nose, lower the nose, lower the nose,'' Sailor told Hillis, to gain speed and lift. Three seconds later, both stall horns went off. Again, Sailor said, ''Lower the nose.'' By now, the plane was rotating steeply left.

Then, ''it's the wrong foot, wrong foot, wrong engine,'' Sailor said. Hillis trying in the dark cockpit to counter the rotation and control the plane, had pressed the wrong rudder pedal with his foot. The rotation, or yaw, only worsened.

Six seconds later, at 6:34 p.m. ET, the plane slammed into trees four miles from the runway at 200 mph. Fifteen of the 20 on board died.

From wreckage, investigators determined that at impact both engines were functioning fully. Experts familiar with the flight data say Hillis misdiagnosed the ignition light and overreacted—escalating a minor anomaly into a catastrophe.

Familiar flaws had shown up again, this time for real: suspect landing skills; the tendency to make major, abrupt corrections; poor judgment. Preoccupied by the engine problem—the tunnel vision others had worried about—Hillis ignored the first rule in an emergency: keep flying the plane.

He decided unequivocally that he had a dead engine but then didn't conform it by advancing the throttle or checking the rpm gauge.

The left engine could have lost power then regained it. One thing the light is designed to indicate is that an internal system is trying automatically to reignite the engine.

But in training, according to crash investigation records, Eagle pilots were taught an ignition light coming on meant only one thing: flameout.

Eagle instructors followed the operating manual of the Jetstream's manufacturer, British Aerospace. Less than a month after the crash, the company issued a ''Notice to Operators'' that clarified what it means when the light comes on. And Eagle has since changed its training manual.

The decision not to land turned out to be fatal.

In post-crash tests, investigators found that sometimes, with engines at idle, the light came on when propeller speed levers were advanced quickly. Hillis had done that five seconds before he saw the light.

One thing is clear: Most pilots, trained to land planes on one engine, would have shut down the bad engine and landed—not tried a go-around at 1,800 feet. It was the decision to circle that led to the sequence of events that caused the crash.

Sailor must have sensed what was happening. As an instructor in Arizona, he'd logged hundreds of hours teaching people to handle engine failure in flight. American's Baker is convinced, reading the voice transcript, that he ''had a much better sense of what was going on.''

Pilots who have read transcripts of the final seconds give this interpretation:

Sailor's comments seem intended to keep Hillis on track. ''K, you got it?'' he asks Hillis seconds after the light came on. (Translation: Are you going to keep flying the plane?)

Then, ''We lost an engine?'' (You want the engine-out procedure?)

Later, ''Watta you want me to do; you gonna continue'' the approach? And Hillis says: ''OK, yeah. I'm gonna continue. Just back me up.''

Fifteen seconds before impact, the plane slipping out of control, Sailor says, ''You got it?'' (You want me to take it?)

Finally, six seconds to impact, the recorder catches one last word, from Sailor: ''Here.'' (Here, give it to me.)

But if Sailor thought the captain was in trouble, shouldn't he have suggested shutting down the engine? And if he did finally grab the plane from Hillis, why did he wait until it was too late?

''It's a very difficult move,'' Baker says, ''But if I saw the treetops coming up, you'd have to fight me for that airplane.''

In the culture of airline cockpits, co-pilots assume that seasoned captains know what they're doing. Sailor had been flying as a first officer less than a year. On loan from Miami, he probably hadn't heard the rumors about Hillis. Otherwise, he might have been more assertive.

The NTSB likely will criticize Eagle for not giving pilots enough training in cockpit teamwork. But questions remain:

Was the crew—Hillis and Sailor—dysfunctional? Did Hillis, the pilot in command with the questionable record, fail when it mattered most?

Or were Hillis and Flight 3379's passengers the victims of a system that failed?

[From USA Today, Sept. 26, 1995]

MARGINAL PILOTS PUT PASSENGERS' LIVES AT RISK

(By Julie Schmit and John Ritter)

Marvin Falitz, a pilot at Express II Airlines, failed three flight tests in six years, hit a co-pilot and was suspended once for sleeping in the cockpit during a flight.

On Dec. 1, 1993, on a short trip from Minneapolis to Hibbing, Minn., Falitz tried a risky, steep approach.

Flight 5719, a Northwest Airlines commuter, crashed short of the runway. All 18 on board died. Investigators blamed Falitz. They also blamed the airline for ignoring repeated warnings about his performance.

Other airlines have ignored warnings about bad pilots, too, and passengers have died because of them.

Since November 1987, pilots with documented histories of bad judgment, reckless behavior or poor performance have caused six other fatal crashes—all but one on small airlines. Death toll: 111, including crewmembers.

A USA Today investigation—including reviews of the government's own safety reports—has found that despite the nation's elaborate air safety system, marginal pilots get and keep jobs. This is particularly true at commuter, or regional, airlines, which often run on small budgets and hire the least-experienced pilots.

At regionals, hiring standards vary widely and are sometimes dangerously low. Training and testing procedures don't catch all marginal pilots. A system of independent contractors who test and license pilots is ripe for abuse.

And airlines are sometimes reluctant to fire bad pilots.

These problems are about to get worse: A shortage of well-qualified pilots is expected through the next 15 years because the military, which used to train 90% of U.S. airline pilots, is training fewer and keeping them longer. At the same time, demand for pilots is exploding, especially at regionals—the fastest-growing segment of U.S. aviation.

''The surplus of quality pilot applicants is about to end,'' says Robert Besco, pilot-performance expert and retired American Airlines pilot. ''It is a big problem. But it is a tomorrow problem so the government and airlines have their heads in the sand.''

The military has been a dependable supplier of pilots since the passenger airline industry began growing after World War II. It trains and tests pilots rigorously to weed out poor performers.

As the supply of military pilots shrinks, regional airlines will have to dip deeper into the pool of those trained at civilian flight schools.

Regionals fly smaller planes between cities that major airlines don't serve. Since 1988, major airlines have turned over 65% of the routes less than 500 miles to commuters, says airline analyst Sam Buttrick.

New regional pilots are paid $13,000 to $19,000 a year, one-third of what major airlines pay new pilots. But experience at that level can lead to lucrative jobs at the majors.

Last year, new pilots hired by regionals that fly turboprops had slightly more than half the experience of pilots hired by major airlines. Yet regional pilots can fly 20% more hours than major airline pilots.

Their planes are less automated, and they fly at lower altitudes where the weather is more severe. And because their flights are shorter, regional pilots make more daily takeoffs and landings, which is when most accidents occur.

According to government reports, for the past decade the accident rate for regional airlines has been significantly higher than the rate for major airlines. Still, accidents are rare. People are nearly three times more likely to die in a car than in a 15- to 19-seat plane, says aviation consultant Morten Beyer.

The Federal Aviation Administration, which regulates airlines, asserts regional airlines are safe—and getting safer. Says Transportation Secretary Federico Pena: ''If they're not, we shut them down.''

An analysis of official crash reports, however, shows that some airlines are not always as safety conscious as they should be—or as they say they are. The problems occur at every stage in a pilot's career: licensing, hiring, training and testing.

LICENSING: PILOTS CAN SHOP FOR EASY EXAMINERS

To get a license to fly passenger planes, most pilots are required by the FAA to have at least 191 hours of flying time. Then they must pass FAA tests, usually given by FAA-approved examiners for fees from $100 to $300. Pilots or their instructors can choose the examiners. Just as lawyers can shop for sympathetic judges, pilots can seek easy testers.

''If you're a real hard-nosed examiner, you run the risk that (they) aren't going to call you,'' says John Perdue, an aviation consultant and a retired Delta pilot.

Some flight schools, concerned about abuse, will let students take tests only from examiners they endorse. ''I want to know that (students) are tested by someone who's not giving away that ticket,'' says Steve Van Kirk, 49, at Northwest Airlines pilot and owner of Control Aero Corp. in Frederick, Md.

But not all flight schools are that strict. And the system is vulnerable to other abuses, such as examiners who rush through tests so they can do more in a day.

In 1987, Continental Airlines hired 26-year-old Lee Bruecher as a co-pilot. He was flying a DC–9 when it crashed shortly after takeoff in Denver. The captain, Bruecher and 26 others were killed. Bruecher had been fired in 1985 by Able Aviation in Houston because he had a chronic problem of becoming disoriented—a fact Continental failed to discover.

Safety investigator cited Continental for poor pre-employment screening. Continental has since tightened its screening procedures.

But Bruecher's career might have been cut short long before he got to Continental. In 1983, he passed a test that allowed him to fly multi-engine planes. Two months later, his examiner was fired by the FAA for giving short, easy tests—including one to Bruecher. FAA records say the examiner had been under investigation for nine months.

Poor examiners remain a problem for the FAA. In May, it revoked or suspended the licenses of 12 designated pilot examiners for giving each other phony certificates, allowing them to fly numerous types of planes. The FAA canceled the certificates. It said none of the pilots had used them to fly passengers. It appears the certificates were being collected almost as a game.

HIRING: FEWER PILOTS, LESS COCKPIT EXPERIENCE

After pilots are licensed to fly passengers, most spend years instructing others or flying

cargo. Their goal: build flight hours to land jobs with airlines. Most major airlines require at least 2,500 flight hours; most regionals, at least 1,500. Most pilots, when hired, exceed the minimums.

But when faced with a shortage of pilots, airlines lower their standards.

In 1985, 22% of new regional pilots had fewer than 2,000 hours, says FAPA, an Atlanta-based aviation information service. In 1990, when regionals faced tight pilot supplies, 44% of new pilots had fewer than 2,000 flight hours.

Even in years when pilots are plentiful, regionals hire less experienced pilots.

In 1992, GP-Express hired pilot Vernon Schuety, 29, who had 850 flight hours, and pilot James Meadows, 24, who had 1,100 hours. That June, the two flew together for the first time. They crashed near Anniston, Ala., while attempting to land. Three people died.

Investigators said the pilots lost awareness of the plane's position and blamed pilot inexperience, among other things.

The flight was Capt. Schuety's first unsupervised flight as an airline pilot. GP-Express, a Continental Express carrier, had made him a captain right away, without the usual co-pilot experience.

GP-Express president George Poullos says the pilots met all of the FAA's requirements and that the airline only hires pilots who meet or exceed the FAA's minimums.

HIRING: LITTLE BACKGROUND CHECKING IS REQUIRED

On April 22, 1992, Tomy International Flight 22, doing business as air-taxi Scenic Air Tours, hit a mountain on the island of Maui, Hawaii.

The pilot, Brett Jones, 26, and eight passengers died. Investigators said Jones failed to use navigational aids to stay clear of the mountain. He flew into clouds that hid it.

Investigators faulted the air taxi for not checking Jones' background properly and faulted the FAA for not requiring substantive background checks for all pilots. Jones, investigators' records show, had been fired by five employers, including a major airline, for poor performance. He also lied about his flight experience.

Tomy International didn't uncover those facts because it didn't have a policy of verifying an applicant's background. The FAA started requiring a five-year employment check in 1992. Jones was hired in 1991.

The pre-employment check into Jones' aeronautical background consisted of one phone call to a charter and cargo airline, where Jones had worked one year. That operator said Jones departed in good standing.

Jones also received a recommendation from the previous owner of Tomy International, who had once employed him as a van driver.

Tomy International did not return repeated phone calls.

The FAA requires airlines to do very little when checking an applicant's background. They must verify that the applicant has a pilot license; check motor vehicle records for alcohol or drug suspensions; and verify the applicant's employment for the previous five years.

The FAA does not require airlines to verify flight experience, nor to check FAA records for accidents, violations, warnings or fines—or if an applicant has a criminal history.

''They are strongly encouraged to check all those things and we make it easy for them to do that,'' says Jeff Thal, FAA spokesman.

Most important, an airline is not required to find out how an applicant performed at any previous airline.

Airlines do give applicants flight and oral tests. And most check FAA records and driving histories for more than just alcohol or drug convictions. Two speeding tickets over a year can get an applicant rejected at Southwest Airlines, for example.

''They're not law-abiding,'' says Paul Sterbenz, Southwest's vice president of flight operations.

But an analysis of government crash reports shows that poor pre-employment screening has contributed to passenger deaths.

Consider the Jan. 19, 1988, crash of a Trans-Colorado plane, a now-defunct Continental Express carrier, near Bayfield, Colo. Both pilots and seven passengers died. Investigators faulted the pilots.

The captain, Stephen Silver, 36, had used cocaine the night before the flight. His pre-employment record included a non-fatal crash landing on the wrong runway, a suspended driver's license and five moving vehicle violations in three years.

Co-pilot Ralph Harvey, 42, had been fired from another regional airline for poor performance. his pre-employment record also included two alcohol-related driving convictions and one non-driving alcohol conviction.

At the time, the FAA did not require airlines to check for alcohol- or drug-related driving convictions. Trans-Colorado executives told investigators they were unaware of Harvey's alcohol history, and Silver's driving history and previous crash.

In another example, Aloha IslandAir hired Bruce Pollard. In 1989, Pollard crashed into a mountain, killing himself and 19 others. Investigators cited Pollard's recklessness and faulted the airline's hiring procedures. IslandAir didn't check with Pollard's previous employers, the accident investigation showed.

Two previous employers said he was careless and one of them was about to fire him before he resigned to join IslandAir.

IslandAir learned. After the crash, it added tough screening procedures that weeded out the pilot who later was involved in Tomy International's 1992 Maui crash.

No airline checks what could be the most important records of all: an applicant's training records at previous airlines. To do so could run afoul of privacy laws, they say, and subject the airline that shared them to suits.

Nonetheless, many airlines refuse to hire a pilot unless they get a good reference from a previous airline-employer. Threat of lawsuit or not.

But actual training records aren't shared. Those reveal how pilots make decisions, handle stress and work with others—insights that don't show up in FAA data and insights airlines are hesitant to share.

If training records had been shared, 15 people might not have died on Dec. 13, 1994, when an American Eagle plane crashed near Raleigh-Durham, N.C. A preliminary government report points to pilot error. Capt. Michael Hillis, 29, was distracted by an engine failure warning light. While figuring out what to do, he and his co-pilot let the plane lose too much speed. It crashed four miles from the runway.

Hillis had been forced to resign from his first regional, Comair, because his superiors worried about his skills and decision-making abilities—facts documented in training records that Eagle never saw.

The American Eagle crash has the FAA reconsidering its stance, and Peña says he would support legislation to mandate sharing of information between airlines.

''We need to have that. I don't want unqualified pilots flying those planes,'' he says.

TRAINING: FAA DOESN'T KEEP TRACK OF ALL THE WAIVERS GIVEN

Once hired, pilots have to go through their airline's training program. The FAA approves each program. The airlines set requirements based on FAA minimums that are so low most major airlines exceed them, sometimes by 50%.

''They are the floor and should be viewed that way,'' says William Traub, vice president of flight standards for United Airlines.

Regionals are much less likely to exceed the minimums. Some even fall short. Of 16 larger regionals surveyed at random by USA TODAY, seven—including four American Eagle carriers—said they were allowed to reduce training below FAA minimums. The airlines say they were able to prove their programs were superior or sufficient, even with fewer training hours.

The FAA keeps track of training exemptions, which are granted by Washington after a formal review. But it doesn't keep track of waivers, which are granted at the regional level. The FAA doesn't even keep a central record of how many waivers have been given.

The FAA even grants training waivers to its own inspectors. In 1992, the Department of Transportation inspector general criticized the FAA for allowing 18% of inspectors to skip ongoing training designed to keep them sharp.

The FAA says safety is not compromised. ''The word exemption does not mean we're giving anybody anything,'' says FAA Administrator David Hinson. He says exemptions allow airlines to use new techniques without waiting for new FAA rules.

But the agency has rescinded waivers and exemptions after crashes. For eight years, the FAA allowed Henson Airlines, now Piedmont Airlines, to cut pilot flight training hours by about 40%. That was rescinded in 1985 after 14 people died when a plane crashed near Grottoes, Va.

Investigators blamed inadequate pilot training, among other things. Currently, Piedmont has no training exemptions and exceeds the FAA's minimum training requirements.

The FAA's willingness to grant waivers or exemptions spotlights a flaw in its structure, safety experts say. The agency has two missions: to promote aviation and to regulate it. Critics say they are in conflict.

When an inspector decides on a waiver that might help a carrier financially, is safety compromised? The FAA says no. Others wonder.

''The FAA is understaffed and politically invaded,'' says aviation consultant Michael Boyd, president of Aviation Systems Research Corp. ''The system is corrupt.''

TESTING: IN PASS/FAIL, NO ONE KNOWS WHO BARELY PASSED

Few professionals undergo as much training and testing as pilots. Each year, most captains must have at least two flight tests called ''check-rides.'' Co-pilots have one. These flights with an examiner test a pilot's skill on such things as takeoffs, approaches and landings.

''Check-rides are a series of practiced maneuvers,'' says Robert Iverson, former Eastern Airlines pilot and former CEO of KIWI International Airlines. ''Practiced enough, even marginal pilots can pass.''

In addition, pilots are graded pass/fail. If they fail, they are pulled from the cockpit to get more training. Within days, they are retested. If pilots pass check-rides, as more than 90% do, they keep flying.

The pass/fail system does not recognize that some pilots pass with ease while others struggle.

A small percentage, 1% to 2%, barely pass, flight instructors say. Others put the percentage higher.

''Maybe 5% are getting by, but probably shouldn't be,'' says Van Kirk, the Northwest pilot. Even if 1% are just getting by, that would be more than 500 U.S. airline pilots.

In a 1994 review of major airline accidents, the NTSB called check-rides ''subjective'' and noted differences among airlines in how they graded pass/fail.

And most airlines do not keep closer tabs on pilots who barely pass.

United is an exception. If pilots struggle through check-rides but pass, they are retested within two months instead of the usual six or 12 months, Traub says.

If Express II had a policy of following struggling pilots more closely, pilot Marvin Falitz, who crashed near Hibbing, Minn., might have been weeded out. He failed three check-rides—in 1988, 1992 and 1993. In 1987, he failed an oral exam. Each time, Falitz was retrained and retested the same day. Not surprisingly, he passed, and continued flying.

On two tests, he failed working with other pilots—what investigators faulted him for in the crash.

Since the crash, Express has intensified pilot training. ''Hibbing was an isolated incident and an unfortunate incident,'' says Phil Reed, vice president of marketing. ''We run a safe airline.''

After the crash, Northwest Airlines insisted that all of its commuter partners, including Express, train to the highest FAA standards.

FIRING: PILOTS ARE ALLOWED TO QUIT RATHER THAN BE FIRED

Even when an airline decides a pilot is unfit to fly, the pilot isn't always fired. Comair, a Delta Connection carrier, didn't fire Michael Hillis. It let him resign. Hillis did and started at American Eagle four days later.

Many U.S. airlines will let marginal pilots resign rather than fire them. The reasons: Airlines fear being sued, and problem pilots go away quicker if given an easy way out.

''They're gone with fewer repercussions,'' says Southwest's Sterbenz.

Letting pilots resign often puts them back in the cockpit—of another airline. Still, airlines defend the practice. ''The airlines are pretty diligent in looking out for those people'' who have resigned, says Tom Bagley, vice president of flight operations for Scenic Airlines.

Not always. American Eagle knew Hillis had resigned from Comair. Hillis told Eagle he wanted to live in a different city. But Eagle didn't know Hillis had been forced to resign. Comair didn't provide that information, Eagle says, and the FAA doesn't require airlines to pass on that information.

The reluctance to fire pilots goes beyond fear of lawsuits, however. It is tied to the status and deference that pilots enjoy and to the high cost of training new pilots.

''Airlines carry weak pilots for long periods,'' says Diane Damos, a University of Southern California aviation psychologist. ''It's just part of the culture.''

Says aviation lawyer Arthur Wolk: ''It's aviation's good old boy network. Nobody wants to trash a pilot.''

Co-pilot Kathleen Digan, 28, was given the benefit of the doubt and later crashed a plane, killing herself and 11 others. Digan was hired in 1987 by AVAir Inc., doing business as American Eagle. She was flying a plane that crashed on Feb. 19, 1988, in Raleigh-Durham, N.C.

During a check-ride her first year, the examiner said Digan needed more work on landings. Another called her job ''unsatisfactory'' and recommended she be fired. A captain who flew with her said she ''overcontrolled'' the plane.

But Digan wasn't let go. AVAir's director of operations defended the decision to keep her, telling investigators: ''She had invested a lot in our company and our company had invested a lot in her.''

Even the FAA has protected poor pilots. On Oct. 26, 1993, three FAA employees died in a crash near Front Royal, Va. Safety officials blamed Capt. Donald Robbins, 55.

That was no surprise. During his 10-year career, Robbins flunked three FAA tests. He had two drunken-driving convictions. Eight co-pilots avoided flying with him, and several complained to supervisors. Nothing was done. In fact, in Robbins' last evaluation, his supervisor gave him a positive review and complimented him on his ability to ''get along well with his fellow workers.''

The path pilots take to the cockpit: 1. Enter military or civilian flight school. 2. Pass test to get private license; can't work for hire. 3. Pass test to get commercial license; can work for hire. 4. Many military pilots get jobs at airlines after leaving military. Flight school pilots fly cargo or work as instructors to build experience. 5. Get job as co-pilot at regional airline. 6. Pass airline's training program. 7. Pass test to fly certain type of plane. Testing required each time a pilot switches to new type of plane. 8. Spend first year on probation; get reviews; pass first-year test. 9. Pass test to get air transport license; required to become captain. 10. As captain, must pass medical and two flight tests every year.

Regional airlines scramble for pilots. Growth in commuter or ''regional'' air travel, coupled with a decrease in the number of military-trained pilots, has forced airlines to hire more pilots trained in civilian flight schools.

Military training fewer pilots 1992 3,742 1996 2,678(1).

Regional airline business soaring Passengers (in millions) 1984 26 1995 60(1).

Ranking salaries Average second-year pay for a regional airline co-pilot, compared with the median pay for other jobs: Secretary, $19,100; Phone operator, $19,100; Data entry clerk, $17,150; Co-pilot, $15,600; Receptionist, $15,400; and Bank teller, $14,600.

Comparing accident rates Accident rates for regional airlines that fly planes with 30 or fewer seats are higher than rates for regionals with bigger planes and major airlines. Rates per 100,000 flights:

	1984	1994
Small regionals	.82	.32
Major airlines, large regionals	.23	.24

For this three-day series, USA TODAY reporters John Ritter, and Julie Schmit set out to learn how a marginal pilot slipped through the safety net of a U.S. airline and crashed near Raleigh-Durham last December. They discovered more than one poor pilot had kept flying and that, if nothing changes, more are likely to.

Ritter and Schmit analyzed accident reports since 1985 and obtained FAA documents on current aviation practices through the Freedom of Information Act.

Other sources included the National Transportation Safety Board, which investigates accidents, the General Accounting Office, the Federal Aviation Administration, airline executives, union officials, pilots and safety experts.●

ADDITIONAL COSPONSORS

S. 309

At the request of Mr. BUMPERS, the name of the Senator from Connecticut [Mr. DODD] was added as a cosponsor of S. 309, a bill to reform the concession policies of the National Park Service, and for other purposes.

S. 334

At the request of Mr. HELMS, his name was added as a cosponsor of S. 334, a bill to amend title I of the Omnibus Crime Control and Safe Streets Act of 1968 to encourage States to enact a Law Enforcement Officers' Bill of Rights, to provide standards and protection for the conduct of internal police investigations, and for other purposes.

S. 607

At the request of Mr. WARNER, the name of the Senator from Tennessee [Mr. FRIST] was added as a cosponsor of S. 607, a bill to amend the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to clarify the liability of certain recycling transactions, and for other purposes.

S. 881

At the request of Mr. GRASSLEY, the name of the Senator from Utah [Mr. BENNETT] was added as a cosponsor of S. 881, a bill to amend the Internal Revenue Code of 1986 to clarify provisions relating to church pension benefit plans, to modify certain provisions relating to participants in such plans, to reduce the complexity of and to bring workable consistency to the applicable rules, to promote retirement savings and benefits, and for other purposes.

S. 1136

At the request of Mr. HATCH, the name of the Senator from Wisconsin [Mr. KOHL] was added as a cosponsor of S. 1136, a bill to control and prevent commercial counterfeiting, and for other purposes.

S. 1228

At the request of Mr. D'AMATO, the name of the Senator from Maine [Mr. COHEN] was added as a cosponsor of S. 1228, a bill to impose sanctions on foreign persons exporting petroleum products, natural gas, or related technology to Iran.

ADDITIONAL STATEMENTS

THE COMMERCE, STATE, JUSTICE APPROPRIATIONS BILL

● Mr. ABRAHAM. Mr. President, I reluctantly voted for the conference report for the Commerce, State, Justice appropriations bill, knowing that it will be vetoed, because it does contain many provisions that will do significant good for the country and because much of the funding it provides is very important to our efforts to fight violent crime. I look forward to working with the managers of the bill to resolve the problem areas of this bill when it comes up for consideration again.

Let me begin by outlining what is good in this bill. First, the prison litigation reform title of the bill makes important and needed changes to the Federal laws governing lawsuits brought against prison administrators across the country. Right now, in many jurisdictions, judicial orders entered under Federal law are having an enormously destructive effect on public