STRAIGHT

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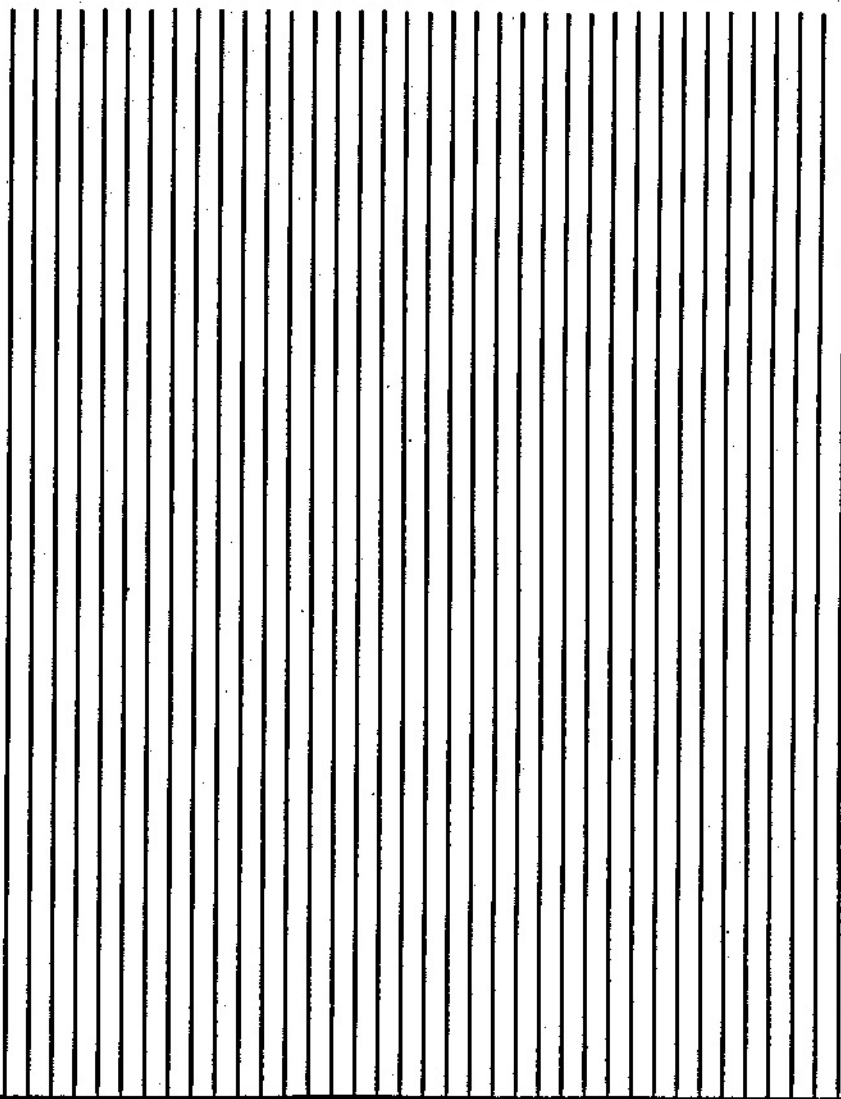
FEDERAL EXPRESS CORPORATION

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Straight In Approach

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Flight Safety News

Flight Safety News is intended for use by Federal Express flight crewmembers in the interest of flight safety. Company manuals and Federal Regulations apply in all circumstances. Topics provided include selected incidents brought to our attention by the Flight Safety Reporting Program.

BY TAKING THE TIME TO <u>COMMUNICATE</u> HAZARDOUS SITUATIONS YOU BECOME THE MOST IMPORTANT LINK IN THE SAFETY CHAIN.

RUNWAY TRANSGRESSIONS

Runway transgressions can be deadly. In fact the worst accident in aviation history occurred due to a runway transgression at Tenerife, Canary Islands. Five hundred and eighty-three souls perished in that 1977 accident.

Taxiing onto or across a runway without clearance, taking off on the wrong runway or without clearance, or landing on the wrong runway or without having received clearance to land happen far too frequently. All of these have happened to us in the last few months. The warning flags are up!

One NASA study indicated that you have a three times higher probability of being involved in an airplane collision on the ground than you do in the air. Everyone knows these can be just as deadly. So, what can we do to reduce the risk of being involved in a runway transgression event? Robert Sumwalt, who writes for NASA's *DIRECTLINE* magazine, offers these suggestions to keep your taxiing from getting you into trouble:

* Ensure that all members of the flight deck crew review the airport diagram **before** beginning the taxi-out.

* Locate the airport chart where it is readily available for reference and is in plain view at all times.

* Write down those taxi instructions and any hold short clearances.

* Reduce distractions. Take your tasks in sequence and don't let a trivial duty interfere with more important matters.

* Use caution when taxiing on any runways, especially when they cross another active runway. They lack the usual taxiway markings such as hold short lines.

* While on taxiways, watch carefully for taxiway/runway hold lines. Do not cross them unless all crewmembers agree that clearance to enter a runway has been received. Confirm your right to cross or enter with ATC if you are not absolutely sure you have such clearance.

* Review the airport chart before landing too. Use special care where a turnoff taxiway crosses another runway, be it active or inactive. (Do not exit your runway onto another runway without specific ATC instructions.)

* Use the same caution during the taxi-in to the gate as you did leaving it. Don't let get-home-itis or fatigue get in the way. Remember that just five more minutes of being alert will see you home safely.

We'd like to offer another addition to this list involving taxi precautions. When you taxi onto a runway threshold which serves two runways be certain you are aligned for the correct runway.

NASA tells us that most incidents involving landing without clearance are out of visual approaches, flights touch down with their crews not being sure a landing clearance was issued. We've noticed that these have happened to us most frequently in day, VMC conditions at the end of a long night's work.

Landing on the wrong runway can be disastrous too. We've had two cases recently of aircraft being cleared to land on a runway which has another parallel to it and landing on the wrong one. In one case the runway chosen (in error) was a closed runway with heavy equipment operating adjacent to it and about to enter it.

One of the most important things you can do to stop a runway transgression before it begins is to use proper radio phraseology and discipline and make sure both you and the controller understand what is about to take place. For example, when a specific runway is indicated for landing (e.g. 21L versus 21R) include that specific runway in your **readback**. The FOM requires pilots to readback runway hold and hold short clearances to ATC. Readback not only offers a chance for critical errors to be caught by ATC but also provides cheap insurance against losing your certificate. If you should happen to readback instructions which are contrary to those intended and they are not corrected by the controller, the controller is now accountable for the error. Not much solace if you get killed in the process, however.

Lastly, we would like you to know that you should always look for conflicting traffic (**see and avoid**) and listen to the instructions or clearances given to other aircraft on your frequency (**hear and avoid.**) When cleared to cross, takeoff, land or hold in position on a runway you should use all of your senses to detect and avoid a developing collision.

SIGNIFICANT OCCURRENCES (INDUSTRY)

The One That Got Away:

The Captain of an air carrier flight diverted to an alternate airport due to weather and encountered confusion after landing...with some unusual consequences. "We were directed to a hard stand to await a gate slot and had the right engine operating. We required about 20 minutes of wait time for other aircraft to move before I settled into my spot on the ramp. I was advised by operations that my gate would be vacant in approximately 5 to 10 minutes. Apparently, more than just refueling redispatch was in order; but, I was not aware of the plans for disposition of the aircraft, crew, or passengers at this point. I elected to keep the right engine running for the short wait on the ramp. We were then cleared by Ground to taxi. We did so, and when clear of the other aircraft...I taxied to the gate.

"While taxiing, my eye caught the fuel quantity gages as I was concerned about my burn while on the ground. I was surprised to note the quantity was almost 10,000 pounds higher than when I parked. I assumed a system malfunction and had the First Officer check A/B systems...both read the same. Since the aircraft did taxi a bit heavier than when I parked, I realized that we had been fueled while stopped...with 95 passengers on board, no cockpit contact, and all doors closed. I don't normally sit glued to the fuel gages while parked, and no other indication of the event was obvious. I was totally unaware of the event , not having been advised to expect it.

"What is even worse, the truck was connected and pumping fuel when we taxied. The fueler managed to emergency release the hose just before reaching the end of the reel."

B-747 Engine Loss on Takeoff:

Shortly after takeoff, the number 2 engine of an Evergreen B-747-100 separated and fell into a vacant lot near the airport. The aircraft was returned for an emergency landing without further incident. The cause of the failure is under investigation.

SIGNIFICANT OCCURRENCES (FEDEX)

Runway Transgression:

One 727 landed over the top of another 727 which had been cleared onto the runway for position and hold at EWR recently. The conditions were night, VMC and the 727 holding in position with anti-collision and navigation lights illuminated was nearly invisible to the landing aircraft's crew until shortly before they passed over it. The landing aircraft had been cleared for a visual approach to runway 4L and had noted that ATIS had declared runway 4R closed. The ATIS information was changed to indicate runway 4R was open a short time after the previous ATIS information was recorded by our crew. When our crew contacted tower they were cleared to land on runway 4R, to which the readback response was, "...cleared to land." Not detecting the change in landing runway, our crew continued the approach to 4L where the landing was made.

As noted in the Runway Transgression article above, readback information is vital and it's always a good idea to read it back including all the information which was given to you. You must also realize that any time you are holding in position on a runway you are vulnerable to the "threat" behind you. The Skywest/USAir collision at LAX in 1991 proved to the world that the conspicuity of aircraft holding on a runway is questionable.

Runway Transgression:

The 727 was cleared to taxi to runway 34R at SLC for takeoff, since runway 34L (the normal departure runway) was closed. After takeoff clearance was received, the aircraft accelerated down the runway and the crew was surprised by the rapidly approaching runway end. They realized that they had in fact taken off on runway 32 which was shorter than 34R. Both runways share a common threshold with lighting which made it difficult to determine that they were not aligned properly for runway 34R. (See Runway Transgression article this issue.)