

The FAA Safety Team (FAASTeam) is committed to improving safety through education and outreach efforts. The FAASTeam works with local safety volunteers and subject matter experts, as well as Air Traffic Controllers, Airport Managers, and other stakeholders to disseminate information on local airports. Through these efforts, we aim to reduce runway incursions and improve safety at airports, for all users.

Thank you,

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FAA Safety Team | Safer Skies Through Education

Potential for Wrong Runway Landings at Tucson International (KTUS)

There have been wrong-runway landings at Tucson International Airport (KTUS), especially when the parallel runways are in use. Many pilots have mistaken RWY 29R for RWY 29L. The approach end of runway 29L is 706' left, and 2,588' further in on the airfield, from the approach end of runway 29R. In addition, RWY 29L is 75' wide, compared to the wider RWY 29R at 150'. Also, be aware that Taxiway Alpha is parallel to RWY 29R and may be mistaken for a runway. Taxiway Alpha is clearly marked in yellow paint "TAXI" as seen from the approach end of 29R. This marking is located on Taxiway Alpha near the A17 taxiway that enters the end of runway 29R.

Pilots are urged to thoroughly plan for their arrival at KTUS in advance. Review the current airport diagram, and the photos that depict the runway system at KTUS.

What is a Runway Incursion? https://www.faa.gov/airports/runway_safety/news/runway_incursions/

Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and departure of aircraft.

What is a Surface Incident?

A surface incident is an unauthorized or unapproved movement within the designated movement area (excluding runway incursions) or an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight.

Pilot Deviations result from pilot actions that deviate from assigned headings and altitudes, instrument procedures, or when pilots penetrate controlled airspace or airspace subject to Temporary Flight Restrictions (TFRs) without ATC clearance. Ground deviations include taxiing, taking off or landing without clearance or deviations from assigned taxi route or failing to hold short of an assigned clearance limit.

Wrong Surface Landing Incidents: Notice Number--NOTC7400

"Be on the lookout for "**Expectation Bias**" If approaching a familiar airport, ATC might clear you for a different approach or landing runway. Be careful not to fall back on your past experiences. Verify!"

Thank you for helping prevent pilot deviations and runway incursions.

Photographs and graphics that follow depict areas of possible confusion at Tucson International Airport (KTUS) where pilots may takeoff, land, and/or cross a surface other than that assigned, resulting in pilot deviations and runway incursions.

Runway 29L



Figure 1: Photograph by Junaid Adil; Barbara L. Harper, DM, Pilot

Runway 29L



Figure 2: Photograph by Junaid Adil; Barbara L. Harper, DM, Pilot

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Hot Spots - Verify currency of charts. https://www.faa.gov/airports/runway_safety/hotspots/hotspots_list/

- **HS 1** RWY 29R may be mistaken for RWY 29L.
- **HS 2** Pilots instructed to hold short of RWY 11L–29R or RWY 11R–29L sometimes cross the approach area of these runways without authorization. This is a **Pilot Deviation**.

Airport Diagram - Verify currency of all charts. Enter KTUS, scroll down for airport diagram.
https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/results/

Airport Charts, Terminal Charts including Approach Plates. Verify currency of all charts. Enter KTUS.
https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

Chart Supplement (formerly called Airport Facility Directory). Verify chart supplement currency. Enter KTUS, *click on Airport/NavAid Listing*. To view the legend, click on *Chart Supplement Legend (PDF)* and scroll down. https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/search/

Sectional Charts - Verify chart currency.
https://www.faa.gov/air_traffic/flight_info/aeronav/productcatalog/vfrcharts/sectional/

Airspace - KTUS is within Class C airspace.
https://atbasics.faa.gov/secured/pdfs/L9_FRM_31.pdf

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/17_phak_ch15.pdf

Aeronautical Information Manual and Pilot/Controller Glossary -
https://www.faa.gov/air_traffic/publications/

Radio Communications Class C Airspace - Reference Aeronautical Information Manual

“Arrival or Through Flight Entry Requirements. Two-way radio communication must be established with the ATC facility providing ATC services prior to entry and thereafter maintain those communications while in Class C airspace. Pilots of arriving aircraft should contact the Class C airspace ATC facility on the publicized frequency and provide their position, altitude, radar beacon code, destination, and request Class C service. Radio contact should be initiated far enough from the Class C airspace boundary to preclude entering Class C airspace before two-way radio communications are established.”

On initial contact:

Who you are talking to

Who you are (full call sign)

Where you are

What you want to do

With (ATIS letter identifier)

Thank you for helping prevent pilot deviations and runway incursions.

Differentiating KTUS from Davis-Monthan Air Force Base (KDMA)

KTUS may be mistaken for Davis-Monthan Air Force Base (KDMA). KDMA is a large military base 4 nm (4.6 sm) Northeast of KTUS. KDMA has one runway, RWY 12-30. KTUS has runways RWY 11L-29R, RWY 11R-29L and RWY 03-21.

To help differentiate, observe that KTUS is between Interstate 10 (I-10) and Interstate 19 (I-19), and confirm correct airport via pilotage, NavAids, GPS, Air Traffic Control, and all available resources. At night, the rotating beacon at KDMA will be a three part sequence through white-white-green. The rotating beacon for KTUS, at night, uses the civilian two part sequence of white-green. Some airports turn on their rotating beacons during the day when weather conditions fall below Visual Flight Rules (VFR).

Please note that KTUS runways are identified as RWY 11L-29R, RWY 11R-29L. This helps avoid confusion with the runway at Davis-Monthan Air Force Base.

- When lined up for KTUS RWY 11L and 11R, you will note, the magnetic heading is 124.9°
- When lined up for KTUS RWY 29R and 29L, the magnetic heading is 304.9°
- RWY 03-21 magnetic heading is 034.9° and 214.9°, respectively, making the runways perpendicular thereby the greatest crosswind, using the preferred runway, is 45°.

KTUS plans to change RWY 11L-29R and RWY 11R-29L to RWY 12L/30R and RWY 12R/30L respectively, in coming years, to be in line with magnetic north.

<https://www.google.com/maps/@32.1388309,-110.8929262,12627m/data=!3m1!1e3>

Flight Service Station "Better Briefings, Safer Flights"

<https://www.1800wxbrief.com/Website/#/>

EasyActivate™, EasyClose™ and Close Reminder services will automatically be turned on for all registered users of www.1800wxbrief.com

Check NOTAMS and TFRs:

For the latest information, call your local Flight Service Station at 1-800-WX-BRIEF

<https://notams.aim.faa.gov/notamSearch/>

<http://tfr.faa.gov/tfr2/list.html>

PIREPS: "Pilot Weather Reports (PIREPs): Pay It Forward"

https://ntsb.gov/safety/safety-alerts/Documents/SA_064.pdf

NTSB Recommends Ways to Increase Use, Effectiveness of Pilot Weather Reports

<https://www.nts.gov/news/press-releases/Pages/pr20170417.aspx>

National Weather Service Tucson

<https://www.weather.gov/>

Review Airport Operations

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/16_phak_ch14.pdf

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More suggestions to include in your flight planning:

- Make note of movement vs. non-movement areas.
- ATC Non-Visibility Areas, areas where Air Traffic Control cannot see you on the ground, are depicted on the airport diagram.

Density Altitude reminder, check it. High elevation/altitude, Hot temperatures, and High Humidity are the worst. High Density Altitude = decreased/bad performance. KTUS runway lengths from the Chart Supplement (formerly called Airport Facility Directory), verify chart supplement currency, enter KTUS, *click on Airport/NavAid Listing* https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/search

RWY 11L–29R: H 10996 X 150 (ASPH–GRVD) (ASPH)—Asphalt (GRVD)—Grooved

RWY 11R–29L: H 8408 X 75 (ASPH) (ASPH)—Asphalt

RWY 03–21: H 7000 X 150 (ASPH–GRVD) (ASPH)—Asphalt (GRVD)—Grooved

The mix of aircraft, speeds and operational requirements vary widely; exercise extreme caution. Wake turbulence, jet blast, helicopter rotor wash, review, steer clear of it; exercise extreme caution.

Access to parking with tie downs, fuel, restrooms, water, pilot weather briefing resources, vending machines for transient aircraft can be found at local Fixed Base Operators.

Click here and scroll down

<https://www.flytucson.com/about-tus/general-aviation/>

Verify fees and fuel prices with commercial aviation apps and websites.

The General Aviation Executive Terminal at the base of the former Air Traffic Control Tower is closed.

A public Pilot's Lounge, with airside accessibility is available 24/7, and is located at 1961 E. Flightline Drive. However, public/transient parking is not available at this time. Public/transient parking with tie-downs is planned to be available by June 2018.

When you land at TUS, you are on the airside of the airport:

“The Airside is the movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.” The airside at Tucson International Airport/ KTUS is fenced, gated and entry is restricted to those wearing badges issued by the airport under Transportation Security Administration rules and regulations.

Please be aware of your movements. Inquire at the FBO about accessing your aircraft before you leave the airside.

Should you require an escort back to your aircraft on the airside, and your FBO is not available to help you, or if your aircraft is tied down at the TUS public / transient Pilot Facility located at 1961 E. Flightline Drive in the future, and you need help getting back to the airside,

call:

Tucson Airport Authority Airside Operations: (520) 573-8190

or

Tucson Airport Authority Airport Communications Center: (520) 573-8182.

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