

R. L. JONES JR. AIRPORT RUNWAY SAFETY ACTION PLAN

RUNWAY SAFETY ACTION TEAM (RSAT) MEETING MINUTES

Richard Lloyd Jones, Jr. Airport, Tulsa (RVS), OK

January 20, 2016

ATTENDEES

NAME	COMPANY		
John Hein	FAA, RVS ATM		
Robbin Kinard	FAA, RVS ATCT		
Steve Mushrush	Tulsa Airports Improvement Trust (TAIT)		
Brian Harmelink	FAA, Mid-America District Manager		
Steven Smith			
Chuck Hannum	Tulsa Airports Improvement Trust (TAIT)		
Jeff Mulder	Tulsa Airports Improvement Trust (TAIT)		
Frank Relja	Tulsa Airports Improvement Trust (TAIT)		
Jeff Hough	Tulsa Airports Improvement Trust (TAIT)		
Crystal Kendzierski	FAA, RVS ATCT		
Bob Peck	FAA, Tech Ops		
Eric Howell	Spartan College		
Frank Klimek	Spartan College		
Mike Barnes	Destinations EFC		
Robert Allen	Tulsa Community College		
Esteban Aldarondo	Tulsa Community College		
Garrett Snow			
Brian Christiansen	RVS Hanger Owner		
Doug Vincent	Angel Flight		
Susan Kraft, MD	AME		
Matt Wise	Tulsa Community College		
Paul Mackey	Jones Riverside Airport Association		
Ken Woodhead	Jones Riverside Airport Association		

1) Introduction. On January 20, 2016, a Local Runway Safety Action Team (RSAT) meeting took place at Richard Lloyd Jones, Jr. Airport (RVS), in Tulsa, Oklahoma. John Hein, FAA Air Traffic Manager at RVS Tower, called the meeting to order at 10:00 a.m. Mr. Hein introduced himself and Jeff Hough, Deputy Director of Tulsa Airports Improvement Trust (TAIT), Robbin Kinard, FAA Support Specialist at RVS Tower, Bob Peck, FAA Tech Ops Manager at Tulsa International Airport (TUL) Tower, Crystal Kendzierski, FAA Local Safety Council and controller at RVS Tower, and Brian Harmelink, FAA District Manager of Mid-America District.

2) RSAT Purpose. Mr. Hein explained the purpose of the RSAT is to: increase surface safety awareness, identify and analyze surface hazards, develop mitigations to reduce risk, foster communications and build relationships in the airport community, and to increase advocacy of runway safety. He stated that the history of runway incursions at RVS in the past was one of the worst in the nation. He gave credit to TAIT and to the local users of the airport who worked diligently to decrease these occurrences. Mr. Hein explained the RSAT must include personnel from the Airport Traffic Control Tower (ATCT) and the airport operators and may include personnel from various FAA lines of business and interested users of the airport. He pointed out that everybody at the meeting met these requirements including the pilots, controllers, airport vehicle drivers, Fixed Base Operator owners, and representatives from flight schools make up the RSAT for this airport. He stated the RSAT meeting is required to be conducted yearly. He provided the team with the definitions of Runway Safety Action Team (RSAT), Runway Incursion, and Surface Event and provided examples to these definitions.

3) Runway Incursion Example. Mr. Hein provided an example of a runway incursion which recently occurred at a similar airport, involving airport vehicles chasing wild animals off the airport property. In the example the vehicle entered the movement areas including crossing a runway without authorization from the tower and created a surface event and a runway incursion. He explained that the event of an animal on the runway was not

considered a runway incursion, but the airport vehicles chasing the animal on the runway without authorization from the tower was a runway incursion. Open discussion was generated when team members recalled recent similar chases at RVS but without creating a runway incursion. Robbin Kinard, Support Specialist at RVS Tower, explained that upon observing or receiving reports of animals, controllers normally report events to airport management. And if the event requires airport vehicles to pursue an animal, controllers give vehicles specific instructions to allow access onto movement areas, including runways, preventing runway incursions. Ms. Kinard advised pilots they may experience some small delays during these times as aircraft may be held at safe locations during these chases. (Some discussion was also made concerning bird hazards and bird strikes.)

4) Review of recent Runway Incursions. Mr. Hein reviewed several surface events and runway incursions occurring at RVS over the past three years including Pedestrian Deviation, Vehicle Deviations, and Pilot Deviations. He displayed each event for all to view and discussed each event providing details of the events. One of the team members pointed out that when controllers referred to runway numbers to pilots crossing the departure ends of the runway some confusion was evident on the student pilots. Another member of the team pointed out that pilot training may be the issue and supported the technique used by controllers when referring to the active runway number. He pointed out that referring to the active runway number should alert other aircraft using the same runway of possible traffic on the runway. He said all pilots should be prepared and aware of the airport environment prior to getting in their aircraft. Other team members agreed.

5) Path to Action. Mr. Hein shared the results of research completed on the contributing factors of recent runway incursions occurring nationwide. He explained that these contributing factors have been broken down into three categories: Visual, Communications, Procedures and Awareness. He discussed each category in detail.

Visual. Mr. Hein shared that pilots with 1,500 hours of flight time or more are primarily involved and pointed out that one or more of the recent runway incursions at RVS involved a pilot with lots of experience. He shared that these incidents involved inadequate or missing signage, recent airfield modifications or construction, and confusing geometry. He pointed out we must keep this in mind as the recent signage project at RVS has left half of the field with outdated signage until the project is complete and the airport has planned future runway construction projects starting this year.

Communications. Mr. Hein shared that pilots continue to mistake the intended recipient of some communications and to commit read-back errors and controllers do not always catch these read-back errors. He continued to say that the pilots and vehicle drivers stated they did not fully understand instructions and did not ask for clarification. Mr. Harmelink pointed out as the controller work force is currently changing to a lesser experience group of controllers and reminded pilots not to assume all actions of the controllers but to ask questions and that open communications may help prevent these occurrences.

Procedures and Awareness. Mr. Hein shared that incident rates are three times as likely to occur during the taxi out to the runway and that pilots, and drivers get lost on the airport surface or are taking wrong turns due to distractions or inattentiveness. Pilots have reported not reviewing the airfield diagram prior to taxi 25 percent of the time while another 25 percent of the time, pilots reported feeling rushed. During open discussion a comment was made concerning an occasional stern control instruction given to student pilots flying without an instructor. Suggestions included having the controllers ride with the pilots on local flights to see the operation of the flight on the other side of the microphone and looking at the possibility of having a way to let the controller know when a student pilot is flying without an instructor. Team members from flight schools indicated they would look into possible solutions.

6) What can we do to fix these? Mr. Hein suggested we should develop an outreach with training and develop guidance and awareness while enhancing operator and controller relationships in order to fix these problems and to prevent runway incursions. He asked the team for their ideas and opened the floor for suggestions. Suggestions included: complete the airfield guidance sign project to bring all signs on the field to national standards (airport has the project scheduled); develop the top safety issues at RVS and distribute to the users (Ms. Kinard will produce with the help of other team members and distribute); reduce frequency congestion by controllers splitting positions more often, or sooner rather than later, if staffing permits, (Mr. Hein will look for

possible solutions) and pilots listen before keying the microphone (Ms. Kinard will include in safety issues at RVS); look at flight schedules of the flight schools to better spread departures and pattern work (Mr. Howell, Spartan College, will provide Tower flight schedule to start research).

7) Remarks by Airport Staff. Mr. Hein introduced Jeff Hough, Tulsa Airports Improvement Trust. Mr. Hough reemphasized the importance that everyone continues to be vigilant in preventing runway incursions and discussed the following recently completed and upcoming construction projects on the airport. Mr. Hough shared with the team that meetings would take place between the Tower, airport management, and other involved individuals to discuss safety issues during upcoming construction.

Construction in the pavement overlay of Taxiway A was completed this last year with no runway incursions as a result of the construction.

Construction in the pavement overlay of Runway 19R/1L is planned to occur in 2016.

Construction project to upgrade airfield guidance signs on the east side of the airfield to meet national requirements is scheduled to be completed in 2017.

Construction is still being proposed in a planning effort to reconfigure the existing taxiways connected to Runway 1L/19R to bring them into compliance with new FAA standards that have been published. For example, Taxiway A2 and Taxiway A3 currently are not at 90 degree angles to runway and do not meet current standards, so they may need to be reconfigured as mentioned in the previous RSAT meeting. The reconfiguration may also lessen confusion of the users while transitioning through these areas.

Construction is still being proposed in a planning effort to eliminate the run-up areas at Taxiway A4 and Taxiway A5, creating standard taxiways while maintaining the run-up area west of Taxiway A, while increasing its size, to bring them into compliance with new FAA standards that have been published.

Relocating Taxiway L, from intersecting Runway 19R to joining the approach end of Runway 19R is another reconfiguration that will probably be pursued to meet the new design standards. Members of the team agreed this change would improve safety by eliminating the need for aircraft to taxi on the runway for the purpose of crossing and may have prevented a recent runway incursion.

Mr. Hough informed the team of the upcoming relocation of the compass rose and asked that any suggestions for a new site be submitted to the airport management.

Mr. Hough shared information on the Wildlife Hazard Assessments currently ongoing which will provide airport management a report later this year with fundamental wildlife and habitat information along with recommendations to reduce any wildlife hazards identified. Funding for this assessment is provided by the FAA.

8) Open discussion from floor. Mr. Hough gave the meeting back to Mr. Hein. Mr. Hein opened the floor to any other questions or concerns from the members of the team.

Team member suggested adding pavement markings in-lieu of changes to the airfield guidance signs for a quicker solution at a lower cost. Mr. Hough responded that this airport does not require these additional pavement markings but must meet FAA requirements on signs. He added that pavement painting also has reoccurring costs for maintenance.

Team member questioned Mr. Hough as to a new egress into the hangar area which does not have the same airfield sign or automatic gate as other egress areas, and asked if this new egress area would soon get a sign and gate. Mr. Hough stated there were other egresses without the signs and gates and that airport management make a determination based on assessed risk as to whether or not a new egress requires a sign and/or gate. He also said airport management would add signs and/or gates as needs arise.

8) Review of last RSAT Action Items. Mr. Hein and Mr. Hough provided a review to the team members on current airport projects and the progress of the action items listed in the last RSAT.

Action Item - Standardize Taxiway Signage.

Phase 1. Electrical rewiring for all new signage, new electric vault, and new Precision approach Path Indicators (PAPIs) for Runway 1R/19L. This phase was completed on 6/19/2013 and was considered closed.

Phase 2. Signage installation primarily on the west side of the airfield includes replacing guidance signs to meet standards, adding "Distance To Go" signs to aid Air Traffic Control, relocating a few taxiway signs to be better viewed by aircraft exiting runways, the relabeling for those taxiways outside the movement area from a single letter designation to a double letter designation, relocation of the airport beacon, and installation of Runway End Identifier Lights (REILs) for Runway 1L/19R. The airport has retained some non-standard signs in selected locations which were previously installed to address runway incursions in areas that had been problematic. This phase was completed on 06/04/2014 and is considered closed.

Phase 3. Signage installation primarily on the east side of the airfield includes replacing guidance signs to meet standards, relocating a few taxiway signs to be better viewed by aircraft exiting runways, and the relabeling for those taxiways outside the movement area from a single letter designation to a double letter designation. This project is nearing final design and, pending anticipated FAA grant funding, is expected to bid this summer. If grant funding is received, the project should start this fall and be complete in 2017. Consistent with Phase 2, the airport will retain the use of some non-standard signs in selected locations which were previously installed to address runway incursions in areas that had been problematic. This item is currently open while waiting construction to start in mid 2016.

Mr. Hein advised the team members not to wait until next year if anyone of them knew of an issue, but to let him or airport management know so that the issue may be worked on beforehand. He reminded team members that without the help of all the team members we could not improve the safety of this airport. He adjourned the meeting and encouraged the attendees to pick up educational materials that were made available on a table and offered the use of additional material available upon request.

9) Open Action items. Action items were identified by the team as set forth below.

ACTION ITEM	RESPONSIBILITY	START DATE	END DATE
1. Standardize Taxiway Signage.			
Phase 1 - Electrical wiring for signage	Tulsa Airports Improvement Trust	05/19/2009	COMPLETED
Phase 2 - Signage installation (west)	Tulsa Airports Improvement Trust	10/01/2013	COMPLETED
Phase 3 – Signage installation (east)	Tulsa Airports Improvement Trust	6/30/2016	06/30/2017

Although several suggestions will be acted upon to help better our community at the airport, all team members agreed these actions will not be listed Action Items for this plan.