ASRS Database Report Set

Controller Reports

Report Set Description.....A sampling of reports from Air Traffic Controllers.

Update Number.....33

Date of Update.....March 25, 2022

Number of Records in Report Set.....50

Records within this Report Set have been screened to assure their relevance to the topic.

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000

TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded when evaluating these data of the following points.

ASRS reports are submitted voluntarily. Such incidents are independently submitted and are not corroborated by NASA, the FAA or NTSB. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Information contained in reports submitted to ASRS may be clarified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information represents the perspective of the specific individual who is describing their experience and perception of a safety related event.

After preliminary processing, all ASRS reports are de-identified and the identity of the individual who submitted the report is permanently eliminated. All ASRS report processing systems are designed to protect identifying information submitted by reporters; including names, company affiliations, and specific times of incident occurrence. After a report has been de-identified, any verification of information submitted to ASRS would be limited.

The National Aeronautics and Space Administration and its ASRS current contractor, Booz Allen Hamilton, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

B Hooey

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

Certain caveats apply to the use of ASRS data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, mechanics, flight attendants, dispatchers or other participants in the aviation system are equally aware of the ASRS or may be equally willing to report. Thus, the data can reflect **reporting biases**. These biases, which are not fully known or measurable, may influence ASRS information. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area "A" than area "B" simply because the airmen who operate in area "A" are more aware of the ASRS program and more inclined to report should an NMAC occur. Any type of subjective, voluntary reporting will have these limitations related to quantitative statistical analysis.

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the **real power** of ASRS data is the **qualitative information** contained in **report narratives**. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.

Report Synopses

ACN: 1839660 *(1 of 50)*

Synopsis

A Tower Local Controller reported a departing VFR aircraft reported a NMAC with a preceding departure.

ACN: 1839658 *(2 of 50)*

Synopsis

Three DEN Tower personnel reported short staffing and asking for the Airport Acceptance Rate to be lowered.

ACN: 1839656 *(3 of 50)*

Synopsis

TRACON and Tower Controller reported they were made aware by a pilot that an aircraft had flown above them while on descent causing an NMAC.

ACN: 1839411 *(4 of 50)*

Synopsis

A Controller reported a complete loss of radar and communications due to communication and radar site failures in Miami Center's Oceanic Airspace area. The reporter states a radar site routinely fails and there are insufficient back up communications sites in this airspace.

ACN: 1837947 *(5 of 50)*

Synopsis

ZOA Oceanic Controller reported a problem with ATC equipment that did not probe the airspace correctly.

ACN: 1836220 *(6 of 50)*

Synopsis

ASE TRACON Controller reported a Traffic Conflict in Aspen airspace and recommends a change to Class C for the airport to avoid future similar conflicts.

ACN: 1835212 *(7 of 50)*

Synopsis

ZLA Controller reported an airspace deviation when an air carrier went through two sectors undetected, until the third sector Controller identified the aircraft.

ACN: 1835211 *(8 of 50)*

Synopsis

D10 TRACON Controller reported problems with aircraft being too low on the approach to DFW 17C/35C with possible glide slope issues.

ACN: 1834613 *(9 of 50)*

Synopsis

ZMA Center controller reported an unsafe situation due to lack of coordination from the Front Line Manager and the Traffic Management Unit. Controller also made reference to the added sector complexity due the metroplex project changes.

ACN: 1834356 *(10 of 50)*

Synopsis

A Center Controller reported two VFR military aircraft from Eglin AFB entered a holding pattern at non VFR altitudes (14,000 and 15,000 feet) adjacent to R2915 and in conflict with the major traffic flows through the sectors. The previous day the military's request for these aircraft to perform this operation on IFR flight plans had been denied.

ACN: 1833583 *(11 of 50)*

Synopsis

ZMA Controller reported problems associated with the new metroplex design of a departure that caused a conflict between two aircraft.

ACN: 1832965 *(12 of 50)*

Synopsis

A TRACON Controller reported an aircraft flying an Obstacle Departure Procedure reported not receiving the VOR while still below the Minimum Vectoring Altitude. The Controller reported Supervisors told the reporter they should have vectored the aircraft while below the Minimum Vectoring Altitude.

ACN: 1832950 *(13 of 50)*

Synopsis

Center Controller reported an airspace deviation associated with a procedure that the receiving Controller may not have been understood.

ACN: 1832225 *(14 of 50)*

Synopsis

ATC Controller reported during a position change with another controller, two aircraft entered into an airborne conflict situation. The conflict was not immediately noticed because the ATC personnel were social distancing.

ACN: 1832221 *(15 of 50)*

Synopsis

A Center Controller reported a C208 rapidly descended below its assigned altitude, was not responding to ATC calls, and flew below the Minimum IFR Altitude, later the pilot established communications, climbed to a safe altitude and returned to its point of departure.

ACN: 1831646 *(16 of 50)*

Synopsis

FDK Tower Controller reported the runway extension which was previously charted was removed from the latest charts and will not be published until March of 2022. The reporter states this will potentially cause runway excursions, incursions and confusion for pilots.

ACN: 1831246 *(17 of 50)*

Synopsis

A TRACON Controller reported they vectored two aircraft off the final approach course to avoid an unidentified VFR aircraft which departed an airport underneath the final approach course. The reporter states this conflict occurs frequently and recommends extending controlled airspace to prevent further occurrences.

ACN: 1831234 *(18 of 50)*

Synopsis

MSN Controller reported issued relating to the Oshkosh fly in and departure.

ACN: 1830970 *(19 of 50)*

Synopsis

Tower Local Controller reported a departing aircraft was in conflict with arriving traffic under TRACON control. The reporter advised the departing aircraft who then took evasive action while below the Minimum Vectoring Altitude.

ACN: 1830963 *(20 of 50)*

Synopsis

A Tower Local Controller reported issuing a go around instruction to a landing aircraft after noticing another aircraft crossing the runway hold short lines.

ACN: 1830956 *(21 of 50)*

Synopsis

A TRACON Controller reported an aircraft instructed to intercept the localizer flew through the localizer twice, once resulting in flight below the Minimum Vectoring Altitude.

ACN: 1830406 *(22 of 50)*

Synopsis

A TRACON Controller reported an aircraft experienced a complete electrical failure/communication loss and descended through the altitude of another aircraft while reversing course to return to their departure airport.

ACN: 1829963 *(23 of 50)*

Synopsis

JAN Tower Controller reported the fire alarm goes off periodically for no reason. This is a known reoccurring issue. Reporter stated not knowing if it is a real fire or a false alarm every time it goes off is an issue which causes distraction.

ACN: 1829953 *(24 of 50)*

Synopsis

Center Controller reported issues with weather were further complicated by the TMU's reluctance to help with reroutes or flow.

ACN: 1829345 *(25 of 50)*

Synopsis

TRACON controllers reported communication problems resulting in incorrect altitudes assigned to a UAS.

ACN: 1829342 *(26 of 50)*

Synopsis

Center Controller and pilot reported that while attempting to land at a non towered airport at night the runway lights would not activate so the pilot diverted to a nearby airport. The pilot executed a missed approach to divert but did not comply with ATC instructions and flew below the Minimum IFR Altitudes.

ACN: 1829050 *(27 of 50)*

Synopsis

A Center Controller reported they vectored an aircraft below the Minimum IFR Altitude while trying to assist them in avoiding weather.

ACN: 1829049 *(28 of 50)*

Synopsis

A Tower Controller reported they had issued instructions to a VFR aircraft in the pattern which resulted in flight below the minimum safe altitude.

ACN: 1828775 *(29 of 50)*

Synopsis

Controller reported an airspace violation due to an aircraft that had a pressurization problem.

ACN: 1828551 *(30 of 50)*

Synopsis

ZME Controller reported a BNA TRACON Controller refused to let an aircraft make an approach into BNA.

ACN: 1827510 *(31 of 50)*

Synopsis

A Center Controller reported a conflict between an Air Carrier departure and a satellite airport skydiving operator who was conducting jumps in the vicinity of charted departure and arrival procedures. The reporter stated they anticipate the same situation will become a recurring problem.

ACN: 1827504 *(32 of 50)*

Synopsis

TRACON Controller reported they did not notice an aircraft descending below its assigned altitude and below the Minimum Vectoring Altitude.

ACN: 1827500 *(33 of 50)*

Synopsis

EVV TRACON controller reported misunderstanding JO 7110.65 approach clearance procedure which resulted in aircraft being below the MVA.

ACN: 1827473 *(34 of 50)*

Synopsis

Tower Controller reported clearing an aircraft for takeoff with another aircraft on short final which resulted in the flight crew initiating a go around.

ACN: 1827469 *(35 of 50)*

Synopsis

TRACON Controller working busy combined arrival sectors descended an aircraft from 6,000 feet to 5,000 feet which caused a conflict with another aircraft.

ACN: 1827217 *(36 of 50)*

Synopsis

A TRACON Controller and Tower Controller reported an aircraft cleared for a Visual Approach turned toward the wrong airport. Prior to the deviation the TRACON Controller had restricted this aircraft's altitude and vectored it through the Final Approach course to avoid unidentified VFR traffic highlighting the need for restrictive airspace around busy commercial airports.

ACN: 1826902 *(37 of 50)*

Synopsis

ZJX Center Controller reported a loss of separation between two aircraft entering holding patterns. Controllers in the area were working combined sectors with no supervisor when adjacent facilities closed their airspace causing the reporter's area to have to hold aircraft unexpectedly.

ACN: 1825643 *(38 of 50)*

Synopsis

FLL Tower Controller reported a runway incursion caused by a vehicle entering the runway while an air carrier was flaring to land.

ACN: 1825642 *(39 of 50)*

Synopsis

Aspen Tower Controller reported a problem with a helicopter and traffic departing Aspen.

ACN: 1825639 *(40 of 50)*

Synopsis

Aspen Tower Controller reported problems associated with aircraft in relationship to the high terrain and high MVA's surrounding the airport.

ACN: 1825635 *(41 of 50)*

Synopsis

ZDV Center Controller reported the Monitor Alert Parameter numbers for two sectors became over-saturated and unsafe.

ACN: 1825634 *(42 of 50)*

Synopsis

A SAT TRACON Controller reported two instances of jet aircraft on final approach to SAT conflicting with gliders maneuvering into and out of a non-towered airport (5C1) located underneath the final approach course.

ACN: 1825628 *(43 of 50)*

Synopsis

Jacksonville Center Traffic Management Coordinator reported asking the Command Center for help and was denied. This resulted in the East Area getting overwhelmed and sectors becoming so inundated with aircraft that they were almost out of control.

ACN: 1825624 *(44 of 50)*

Synopsis

A TRACON Controller reported a departing Cessna deviated from the departure procedure and flew below the Minimum Vectoring Altitude.

ACN: 1825015 *(45 of 50)*

Synopsis

A Center Controller reported a flight crew descended below the minimum IFR altitude after he missed the crews incorrect read back of the assigned altitude.

ACN: 1823740 *(46 of 50)*

Synopsis

LAX Tower Local Controller and the Local Assist Controller reported an aircraft which had been instructed to hold short of the runway taxied on to the runway at the same time a departure was beginning their takeoff roll.

ACN: 1823728 *(47 of 50)*

Synopsis

LAX Ground Controller reported ongoing issues relating to poor signage at the airport.

ACN: 1823717 *(48 of 50)*

Synopsis

HLN Tower Controller reported a NMAC between two opposite direction aircraft.

ACN: 1823704 *(49 of 50)*

Synopsis

TRACON Controller reported an IFR pop up aircraft was given an IFR altitude resulting in an airborne conflict with an IFR departure.

ACN: 1823435 *(50 of 50)*

Synopsis

A Center Controller reported a skydiving operation aircraft was operating along the departure path of two air carrier departures. The first air carrier was issued a traffic alert and the second departure turned off course below the Minimum IFR Altitude to avoid jumpers.

Report Narratives

ACN: 1839660 *(1 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase.Other
Route In Use : None
Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase.Other
Route In Use : None
Airspace.Class D : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TWR
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 5
ASRS Report Number.Accession Number : 1839660
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

Aircraft X was on departure for Runway XXR traffic pattern. Once I had runway spacing between two category 1 aircraft I cleared Aircraft Y for takeoff in the traffic pattern for Runway XXR. Aircraft X upwind was unusually further than expected. As I was attempting to request an IFR release for an air carrier off of Runway XY I noticed that Aircraft X had made a slightly earlier than expected cross wind turn at a higher altitude than normal. I issued a traffic call to Aircraft Y, and that is when a transmission with no call sign said "they almost hit us" I had visual on both aircraft and continued to separate both aircraft in the downwind. I could have initially notified the following aircraft (Aircraft Y) of the proceeding aircraft's intentions, and let know my intention to have aircraft follow in the traffic pattern.

Synopsis

A Tower Local Controller reported a departing VFR aircraft reported a NMAC with a preceding departure.

ACN: 1839658 *(2 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : DEN.Tower
State Reference : CO

Aircraft

Reference : X
Make Model Name : No Aircraft

Person : 1

Location Of Person.Facility : DEN.Tower
Reporter Organization : Government
Function.Air Traffic Control : Supervisor / CIC
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4
ASRS Report Number.Accession Number : 1839658
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Fatigue
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Facility : DEN.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 6
ASRS Report Number.Accession Number : 1839662
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

Person : 3

Location Of Person.Facility : DEN.Tower
Reporter Organization : Government
Function.Air Traffic Control : Other / Unknown
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4
ASRS Report Number.Accession Number : 1839667
Human Factors : Distraction
Human Factors : Workload
Human Factors : Communication Breakdown

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected.Other
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Company Policy

Narrative: 1

Short staffing shift: We had a total of 4 CPC's until XA:00 local, then down to 3. We were in a staffing trigger, however the rate was way too high. The agreed rate by NATCA and Management with said staffing should be a 38 AAR [Airport Acceptance Rate], instead, we started the shift with 114 (unrestricted) and then down to a 76 at 3 CPC's. Everyone felt unsafe: the CPC's, the TMC, the OS. We brought this to the attention of everyone involved. The ATM, the District, Center, TRACON, and Command Center. We all agreed to lower the rate to a 48 later in the night since the 114 and 76 rate already had aircraft in the air for the time. The 48 rate was implemented, the Center, TRACON and Command Center were all on board. Then the NOM [National Operations Manager, (at the Command Center)] and the District Manager talked, and brought us back up to the 76. The ATM said keep the CPC's on position as long as necessary. I asked the question, what is unsafe? 6 hours on position? He said if need be. Overall, we did have many controllers on over 2 hours, 1 CPC stayed on position for 3.5 hours working LC. 1. Were you, or the employees you were supervising, working too many aircraft? Yes 2. Were you, or the employees you were supervising, responsible for too much airspace? Yes 3. Were you, or the employees you were supervising, unable to provide additional services (e.g., solicitation of PIREP's, issuance of depicted weather, issuance of traffic advisories)? No weather that night, however, would have been much worse if there had been. 4. Was the volume and/or complexity of traffic managed to allow for a safe operation? No 5. Were positions de-combined in a timely manner? No 6. Were you, or the employees you were supervising, able to staff properly? No, to safely run the operation, Management and NATCA locally believe we should have a minimum of 7 positions open. 9 would be ideal (I.e. 4 LC's, 2 GC, CD, 2 CC).... We ran the shift with only 4 open, many over two hours. 7. Did the lack of staffing cause you to be fatigued (e.g., increased time on position or increased volume)? Yes 8. Did you have enough people to run the shift with the volume and/or complexity of traffic? No, our staffing guidelines require 10, we had 3 CPC's. 9. Were Traffic Management Initiative(s) implemented to address the volume and/or complexity of traffic? No, we were denied. 10. Was a Staffing Trigger Form filled out? Yes 11. Was there proper shift management and/or planning to address the volume and/or complexity of traffic during special events (e.g., weather events, Super Bowl, NASCAR, Final Four, airshows)? We tried, we were overrun. We have had many reports of similar events. We have filed hotlines on similar events. Nothing has changed.

Narrative: 2

At the beginning of the shift we started with 4 CPC's which latter declined to 3. During my second session I worked over two hours with a 30 minute break. On my third session because of staffing I was required to work for 3 hours and 20 minutes. During the latter

part of the session around 2 hours I became fatigued and tried. I was working all the locals on the west side of the airport and because of staffing I had to work all the grounds also for most of the three hour session. Having to continuously scan all taxiways for taxing aircraft while safely watching aircraft landing on three runways became difficult at times working for that long. This has been a constant problem for most of the year. More Staffing is the number one cause for concern. The facility needs more bodies training as soon as possible with only having half of the CPC's required to work safely.

Narrative: 3

On Date, Denver tower had 3 CPC's on the swing shift. Our staffing guidelines call for 10, so we were at 30% staffing. The supervisor spent the beginning of the shift calling the TRACON, Center and Command Center to ask for a reduced arrival rate because he felt the rate should be 48 instead of 114 for safety. There was agreeance [an agreement] between the facilities to take some pressure off of the airport. The ATM [Air Traffic Manager] then came upstairs and told the supervisor that at the direction of the District, we were to increase the arrival rate, and that the 3 controllers were to stay on position "indefinitely" if that's what it takes. Controllers shouldn't ever be working LC3, LC4, arriving 3 runways, combined up with GC3 and GC4 and turning their back to traffic to help work CD. Controllers shouldn't be on position 'indefinitely' doing 3 people's jobs. There should never be 100% of the workforce on position with ZERO relief on break to call back to the operation to relieve a controller in the case of an emergency or if traffic gets too busy or complex to handle. It's unsafe, but we're allowing this cultural drift to occur and we're normalizing task saturation. When a supervisor asks for the rate to be reduced to maintain safety, it should be done. If it was the wrong call, it should be discussed and reviewed later. They shouldn't have to beg for it or spend the first several hours of their shift on the phone to coordinate it when the controllers need the supervisor's extra eyes on the operation. And someone outside of the facility shouldn't be able to deny their request and shove more airplanes into the airspace than we can safely work just because they don't want to answer hard questions about why Denver Tower is critically understaffed. We talk a lot about safety in the FAA. We say that safety comes first. We say if you see something, say something. Working with so few controllers without reducing the arrival rate is an accident waiting to happen, and I don't choose those words lightly. Immediate Needs: 1) When Denver Tower requests a reduced rate due to critical staffing, it should be granted. If there are questions from the district regarding that decision, it should be reviewed and discussed later (we should err on the side of safety). 2) Local and district management and NATCA should meet to agree upon acceptable arrival rates on critically staffed shifts. Longterm Solutions: 1) We need a special bid for Denver Tower open to level 9 & up tower controllers 2) We need extra staffing at the simulator to run 2 shifts per day to increase the throughput of trainees 3) We need to be proactive and get an increased CPC target number for Denver Tower, because we are already working more traffic than we ever have and there are many more gates scheduled to open soon.

Synopsis

Three DEN Tower personnel reported short staffing and asking for the Airport Acceptance Rate to be lowered.

ACN: 1839656 *(3 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class C : ZZZ
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Flight Plan : None
Flight Phase : Cruise
Airspace.Class E : ZZZ

Person : 1

Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2.75
ASRS Report Number.Accession Number : 1839656

Person : 2

Location Of Person.Facility : ZZZ.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1839657

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Primary Problem : Aircraft

Narrative: 1

I was working West Radar with all sectors combined to me. I descended Aircraft X to 6,000 MSL when he crossed into my airspace and told him to expect Runway XXL. Visual approaches were being advertised on the ATIS. I pointed out the field to him either abeam the field or just prior to that point and he called the runway in sight. I cleared him for the visual approach and shipped him to tower while he was on a north downwind. I did not observe any traffic for him along his route of flight. I was vectoring another aircraft for the visual approach to Runway XXR when Tower called down and said that Aircraft X reported an aircraft about 200 feet above him. I then looked and saw a primary target southeast bound that I was not talking to, nor had I seen him prior to shipping him. I called out to the supervisor that Aircraft X had an aircraft about 200 feet above him that I wasn't talking to. I continued to work my traffic and tracked the primary target until I got relieved from position about 5 minutes later.

Narrative: 2

Aircraft X contacted Tower in a wide right downwind, cleared for visual approach RWY XXL at ZZZ. I was working local control and cleared Aircraft X to land RWY XXL. After turning about a 12 mile right base, Aircraft X reported Aircraft Y a couple hundred feet above him a mile back. I informed Aircraft X that i was only showing a faint primary target a couple miles behind him, which usually indicates low level traffic or "ghost" targets, and asked him to verify that the traffic was above him. Aircraft X confirmed that Aircraft Y traffic was a couple hundred feet above him, which would have been approximately 5,500 Feet MSL. I informed Approach Control of the traffic maneuvering above and outside of the Class C airspace and the CIC (Controller in Command) called the OS/FLM (Front Line Manager) to inform him of the situation. Upgrade ZZZ Class C airspace to increase the lateral limits, allowing us to accommodate airlines to extended final patterns and requiring VFR aircraft to have ADS-B and be talking to ATC within 12 miles at 5,500 Feet MSL.

Synopsis

TRACON and Tower Controller reported they were made aware by a pilot that an aircraft had flown above them while on descent causing an NMAC.

ACN: 1839411 *(4 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZMA.ARTCC
State Reference : FL

Aircraft

Reference : X
ATC / Advisory.Center : ZMA
Aircraft Operator.Other
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission.Other
Flight Phase : Cruise
Flight Phase : Descent
Flight Phase : Climb
Route In Use : Oceanic
Airspace.Class A : ZMA

Person

Location Of Person.Facility : ZMA.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Supervisor / CIC
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11
ASRS Report Number.Accession Number : 1839411
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Time Pressure
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

At approximately XX:15 am the GTK radar site was out of service and no targets appeared on the screen. First safety issue: Greater than 90% of ocean area only has secondary radar. We don't have primary radar. The point may be moot in this scenario but should be noted and addressed. At approximately XX:18 am we had lost the entire GTK frequency site which includes 126.45, 125.1, and 135.2. Second safety issue: At this point 2 entire sectors (62 and 63) do not have any radar services, primary or secondary, or any direct radar sites to communicate with aircraft. In short, there are approximately 35 planes and 7,000 people that cannot be seen or communicated with, and 102,480 square miles of airspace that is completely unworkable and as dangerous as the National Airspace System could possibly be for more than 10 HOURS! Controller relayed through aircraft on the nearest frequency site (ZIN) to relay on guard to separate aircraft in conflict within the 102,000 square mile zone of equipment failure. Third safety issue. The ZIN site used for sector 43 to relay to the 102,000 square mile dead zone had only 1 of the 2 working frequencies! 126.45 on ZIN transmitter was working but not the receiver. Coordination was accomplished with all surrounding facilities to include, Santo Domingo, San Juan, adjacent ZMA sectors, and Miami Approach to ground stop aircraft. ZWY Center was called to reroute planes through different ZMA sectors and SJU (San Juan) Center. At approximately, XX:45 am the ADE with ZWY (New York Oceanic Airspace) failed and 0 flight plan information was being transmitted to ZMA from ZWY. At this point, I shut off all ZWY flights to ZMA and requested every single plane being rerouted out of ZMA entry points to Jacksonville Center. Fourth safety issue: Complete ADE failure with New York Center and 0 flight plan information transmitting between Centers. It is only by the grace of a higher power that there weren't any TCAS alerts, RA's, or even worse an aircraft accident. If the recommendations and solutions presented in this report isn't taken seriously or implemented in any capacity there will be loss of life...". This should be prioritized as immediately. Some sort of backup frequency site should be established for sectors 62, and 63. There have been plans for a second frequency site at MBPV. A second site in a different location would have meant the world to this area that day. Although, we would not have radar, the Controllers in this area have been trained and know the procedures to successfully and effectively work under non radar conditions, providing a working frequency is available. In comparison, CONUS (Continental United States) airspace has BUECS (Backup Emergency Frequency) sites to help with theses types of failure, along with other multiple back up options. These two sectors and all others in the OCEAN area literally have zero backup options. We desperately need backup options and more over lapping frequency coverage. Although, I understand that this may be expensive and that foreign territory is involved, the monetary price to pay now will pale in comparison to the eventual punitive damages forced to be paid to the families of the affected. The GTK radar site fails and is listed out of service at a staggering rate. This site is completely unreliable, and is the reason that the OCEAN Controllers are so well trained in non-radar procedures. The solution would be allowing radar feeds from SDO, or any other feasible facility with ZMA. Also, prioritize space based ADS-B that didn't meet the efficiency criteria due to an approximately 98% accuracy rate, or the ground based ADS-B as long as it is not collocated with the faulty GTK radar site. It must be separate to allow for one failure to not affect both systems. In conclusion there is so much more that can be done in ZMA OCEAN area, there is not weather radar, primary radar, backup frequencies, a working EBUS (Enhanced Backup System) or dark system (backup radar display), accurate altimeter stations, etc... These 2 solutions to problems encountered on Date, are about as important a safety issue as there can be. If the agency truly believes safety is the

number one priority, these issues will be resolved as if life depends on it because it actually does.

Synopsis

A Controller reported a complete loss of radar and communications due to communication and radar site failures in Miami Center's Oceanic Airspace area. The reporter states a radar site routinely fails and there are insufficient back up communications sites in this airspace.

ACN: 1837947 *(5 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZOA.ARTCC
State Reference : CA
Altitude.MSL.Single Value : 20000

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZOA
Aircraft Operator : Military
Make Model Name : Military
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Tactical
Flight Phase : Cruise
Airspace.Class A : ZOA

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZOA
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Airspace.Class A : ZOA

Person

Location Of Person.Facility : ZOA.ARTCC
Function.Air Traffic Control : Enroute
Function.Air Traffic Control : Oceanic
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2
ASRS Report Number.Accession Number : 1837947
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight

Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

We had multiple issues with airspace. All of which were FL000-FL999. Most aircraft leaving ZOA airspace required some sort of reroute to avoid airspace. Aircraft X had a special issue as he was low enough, FL200, to be in conflict with the airspace ranging FL000-FL270. I had just taken the sector from the previous controller at around XA:30z, whom had no plan for Aircraft X, and had to find a new route to make him work with air base. I finally gave him ZZZZZ direct 32N12730W direct ZZZZZ1 which probed green. After measuring the distance of the track, it only showed only 33 NM, of which we needed 50 NM. I then probed a new route which would have taken him 8 NM to the boundary of airspace, and it too probed green. It wasn't until I probed a track within 4 NM of the airspace boundary that it showed the aircraft was in conflict with the aircraft. Looking at this and questioning why the airspace did not probe against the aircraft correctly, I asked my supervisor for help. She seemed to believe it was due to a software glitch where the airspace might have been probing for radar-based separation vs our needed oceanic separation. We also had our area representative, and ATOPS specialist come over to check it and he confirmed that the issue must be the software. Thinking that the airspace was not working correctly, and that approximate location of the aircraft indicated about 65 NM from the airspace, I gave him a clearance to proceed direct 42N126W, to increase the angle away from the missile airspace and ensure that he remained 50 NM away from the airspace. This added an extra 80 NM to 100 NM to his already elongated route, but gave me extra time to analyze the situation and ensure his safety. I intended to adjust it later once we got everything else squared away with him and other aircraft that were in conflict, but my supervisor also gave me paperwork to fill out on position to report the situation with the "glitch". As a result, I never got back to him to shorten his route again. It wasn't until about XB:10z I realized why the airspace was not showing the conflict with the aircraft until about. As it turned out, the airspace did not go active until XB:15z, even though the airspace was depicted on my map as hot. This led to the relieving controller to brief it as hot, for my supervisor to think it was active, for our ATOPS specialist to think it was active, and myself. The routes that probed green would have allowed him to exit the protected airspace of the ATCAA in time where as the one that was 4 NM from the airspace would have had him remain inside the protected airspace. From all of us thinking that the airspace was active at that time due to its depiction on the map, rather than checking the time, I ended up giving the aircraft a much longer route than needed to keep him safe. To avoid this potential issue from happening again, perhaps using a different color for the airspace that is pending vs airspace that is currently active. Additionally, when the aircraft shows in conflict with that airspace, the whole airspace would light up as part of the conflict. Possibly adding which segment of his flight was specifically in conflict would have helped prevent any confusion on why the probe was not working. On a slightly separate note, we have a similar issue with aircraft that are crossing in the ocean where they need 15 min to clear. At 15 min 01 seconds it probes green, but if there is a bad time update and it goes to 14 min 59 seconds, it instantly becomes a conflict/loss. As there is only a tool to check crossing distance and not time, having a "yellow alert" where the conflict

would change color to show aircraft crossing at more than 15 min but less than 17 min would help prevent further headaches.

Synopsis

ZOA Oceanic Controller reported a problem with ATC equipment that did not probe the airspace correctly.

ACN: 1836220 *(6 of 50)*

Time / Day

Date : 202109
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ASE.TRACON
State Reference : CO
Altitude.MSL.Single Value : 12200

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ASE
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Climb
Route In Use : None
Airspace.Class E : ASE

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ASE
Aircraft Operator : Air Taxi
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class E : ASE

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ASE.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1836220
Human Factors : Human-Machine Interface
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

Additional documentation for Aspen's need for Class C [Airspace]. Aircraft Y was departing, a VFR (Aircraft X), not talking to ATC, flew into the departure corridor, climbing. Aircraft Y wasn't able to turn because of the mountains, was flying through a 12,100 foot MVA (Minimum Vectoring Altitude), was given a traffic alert. The VFR (Aircraft X) was at 12,200 feet, climbing, Aircraft Y got an RA and descended from 12,100 feet back into high terrain to 11,700 feet to avoid. Had ATC been talking to the VFR (Aircraft X), they would have been able to turn Aircraft Y away from the conflict. Aspen needs Class C Airspace to require VFR aircraft flying through arrival and departure areas are talking to ATC.

Synopsis

ASE TRACON Controller reported a Traffic Conflict in Aspen airspace and recommends a change to Class C for the airport to avoid future similar conflicts.

ACN: 1835212 *(7 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZLA.ARTCC
State Reference : CA

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZLA
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Airspace.Class A : ZLA

Person

Location Of Person.Facility : ZLA.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 17
ASRS Report Number.Accession Number : 1835212
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Other / Unknown
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

While working Sector X during weather and re-routes, the adjacent sector (Sector Y) to the southeast of me was overly saturated with aircraft in a complex sector with hot restricted airspace. The R-side at Sector Y asked for a D-side but was not provided due to staffing. I was assisting R-Y from my position. A non-radar aircraft from Mexican airspace was not coordinated by Mazatlan Center and did not get tracked up. The aircraft flew through Sector Y and my Sector [X] to the northwest undetected until the adjacent sector to the northwest alerted me of Aircraft X's limited data block. I quickly got the aircraft on my frequency, radar contacted the aircraft and handed him off to the next sector. This has been an on-going issue with non-radar aircraft from south of the boarder. Better coordination and tracking procedures need to be established.

Synopsis

ZLA Controller reported an airspace deviation when an air carrier went through two sectors undetected, until the third sector Controller identified the aircraft.

ACN: 1835211 *(8 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DFW.Airport
State Reference : TX

Aircraft

Reference : X
ATC / Advisory.TRACON : D01
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use.Other
Airspace.Class B : DFW

Person

Location Of Person.Facility : D10.TRACON
Function.Air Traffic Control : Approach
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11
ASRS Report Number.Accession Number : 1835211

Events

Anomaly.ATC Issue : All Types
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Procedure
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

The DFW 17C/35C Glideslope on the ILS and the VNAV on the RNAV is not reliable! Both approaches for both runways, are showing aircraft 100 to 300 feet low all the way down final including the FAF (Final Approach Fix)! Management says it's been flight checked, and it checks out fine. Company said it was something to do with certain aircraft with a FMS update. All aircraft are low on the final. I don't want to be working aircraft down those runway finals during IMC weather when an aircraft is too low to the runway. Even though Management knows it's an issue, they say it's not an issue. They say continue using the approaches, but they want us to take aircraft out further on final, so we don't lose vertical separation with the aircraft next to them. I don't understand how that's an issue if there's "not an issue." First, I recommend no Instrument Approaches should be conducted to

these two runways ASAP! I know this will delay the airlines, but this is a safety issue! I also recommend the equipment Maintenance Tech get out to the ILS/RNAV equipment, and find out what the problem is. It has to be an equipment issue. It's unsafe and needs to be fixed ASAP!

Synopsis

D10 TRACON Controller reported problems with aircraft being too low on the approach to DFW 17C/35C with possible glide slope issues.

ACN: 1834613 *(9 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZMA.ARTCC
State Reference : FL

Aircraft

Reference : X
ATC / Advisory.Center : ZMA
Aircraft Operator : Fractional
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class A : ZMA

Person

Location Of Person.Facility : ZMA.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 7
ASRS Report Number.Accession Number : 1834613
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Workload
Human Factors : Situational Awareness
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Air Traffic Control
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

Aircraft X entered Sector 25 airspace without a hand off. Sector 64 was combined at sector 65, with myself as the D-side and Name, as the R-side. We had alerted the supervisor that things were getting out of control, about 15 minutes before it actually got busy. We were working southbound overflights who were routed into our airspace due to weather, southbound arrivals, and all 4 feeds normally as 1 feed northbound. This sector completely blew up and became unusable, with 20+ airplanes all deviating for weather, stacked on top of each other, and no course of action out of it. It was extremely surprising there were not more LoSSes (Lack of Separation Standards) or airspace deviations. The supervisor and TMU failed to recognize or take action, even after being told, that the sector was out of control. Sector complexity has changed due to the Metroplex project, and unfortunately the TMI's have not caught up with it. Erring on the side of caution, the supervisor, with the concurrence TMU should be slowing down and putting on in trail on the sector. Unfortunately, it ends up with the supervisor not taking any action, and the sector controllers caught having to clean up the mess.

Synopsis

ZMA Center controller reported an unsafe situation due to lack of coordination from the Front Line Manager and the Traffic Management Unit. Controller also made reference to the added sector complexity due the metroplex project changes.

ACN: 1834356 *(10 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZJX.ARTCC
State Reference : FL
Altitude.MSL.Single Value : 14000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZJX
Aircraft Operator : Military
Make Model Name : Military
Crew Size.Number Of Crew : 2
Flight Plan : VFR
Mission : Tactical
Flight Phase.Other
Route In Use : None
Airspace.Class E : ZJX

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZJX
Aircraft Operator : Military
Make Model Name : Military
Crew Size.Number Of Crew : 2
Flight Plan : VFR
Mission : Tactical
Flight Phase.Other
Route In Use : None
Airspace.Class E : ZJX

Person

Location Of Person.Facility : ZJX
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 19
ASRS Report Number.Accession Number : 1834356
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.No Specific Anomaly Occurred : Unwanted Situation
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Procedure
Primary Problem : Company Policy

Narrative: 1

Eglin Missions Coordinator had called the day before to try to approve Aircraft X and Aircraft Y, IFR at at 14,000 feet and 15,000 feet, to do holding north of R2915, just to the west of CEW, for a few hours. They were denied, correctly, by the Supervisor. That is right in the way of all departures and arrivals into PNS Approach and VPS Approach, as well as PNS N MOA (Military Operating Area), and some departures/arrivals into PAM Approach. You will be hard pressed to find a worse spot in the entire US airspace to have two aircraft hold for hours, during the middle of the day. They were planning on doing some sort of military targeting or work from that position south into R2915, repeatedly. After being denied on one day they launched anyway on the next day, and claimed to be VFR, at two IFR altitudes. When I took over the sector they had already been approved as pointouts by the previous controller, who had also voiced objections to the Supervisor, but VPS Approach or missions decided to launch them anyway, in spite of being denied the previous day. I worked for probably an hour and a half with Aircraft X and Aircraft Y in the way, moving perhaps three dozen civilian and military aircraft around these two "VFR" aircraft at IFR altitudes. There was no loss of separation, but it greatly increased overall complexity and workload, with little communication or teamwork from VPS Missions. As far as I understand, VPS approach controllers were not exactly happy with these aircraft in the way either, nor was PNS Approach. If there had been more weather in the way, this could truly have been a colossal headache and possibly led to multiple separation errors. Note that the controller relieving me eventually, did not want to take the sector, and invoked Article 65 on the recorded briefing, as well as informing management that he was uncomfortable with the situation. At the time, PNS N MOA was active, just north of the Aircraft X and Aircraft Y holding area, as well as Rose Hill [MOA], along with the standard high level of inbound/outbound traffic, all directed at CEW, during this time of day. I cannot stress enough how poor of a spot that is to have aircraft holding, especially at those altitudes. Never allow this again. VFR or IFR, the FAA cannot allow the military to use up hundreds of square miles of airspace, and then take up even more airspace when they are unable to stay inside there already vast released airspace. They are literally putting civilian traffic in danger. If they must run some sort of targeting mission at R2915, come in from the south. Do not go north out of R2915. Missions coordinators at ZJX must deny these sort of insane requests by default, not approve them and then have the area supervisor try to be the voice of reason at the last second, let alone the controller at the sector. Readers unfamiliar with Crestview sector (R10) will not realize how crowded this airspace gets regularly, let alone with added aircraft holding right in the center, that are not in communication with ZJX, and have a poorly defined holding track/mission.

Synopsis

A Center Controller reported two VFR military aircraft from Eglin AFB entered a holding pattern at non VFR altitudes (14,000 and 15,000 feet) adjacent to R2915 and in conflict with the major traffic flows through the sectors. The previous day the military's request for these aircraft to perform this operation on IFR flight plans had been denied.

ACN: 1833583 *(11 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZMA.ARTCC
State Reference : FL
Altitude.MSL.Single Value : 14000

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZMA
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class E : ZMA

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZMA
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class E : ZMA

Person

Location Of Person.Facility : ZMA.ARTCC
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4
ASRS Report Number.Accession Number : 1833583
Human Factors : Distraction
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

New METROPLEX procedures in effect. Aircraft X out the BNGOS DTA level at 140. Aircraft Y on the BNGOS1 SID level at 130 filed for 400. Climbed via the SID to FL230. Aircraft are laterally separated, radar picture appears like the old procedure of WINCO/THNDR DTA, aircraft exit Miami Approach laterally separated and remain separated. Aircraft Y turns into the flight path of Aircraft X due to the SID, Aircraft Y is instructed to expedite descent to 130 and given a heading of 020 to diverge. Aircraft X checks on, reports Aircraft Y in sight, and is given a westerly heading to diverge. The aggressive cross-outs of the Metroplex SIDS cause multiple conflicts during high traffic volume or NORDO scenarios. Recommend true parallels out DTAs to ensure lateral separation, and allow controllers to use headings/speeds/altitude to expedite traffic flow.

Synopsis

ZMA Controller reported problems associated with the new metroplex design of a departure that caused a conflict between two aircraft.

ACN: 1832965 *(12 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 3200

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Component

Aircraft Component : ILS/VOR
Aircraft Reference : X
Problem : Malfunctioning

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 13
ASRS Report Number.Accession Number : 1832965
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X was departing on the ZZZ1 Obstacle Departure Procedure which climbs on a heading to intercept a VORTAC radial. The aircraft was NW bound, as expected, when the pilot advised that they were not receiving the VORTAC and requested a radar vector. The aircraft was at 3,200 in a 4,000 ft. MVA (Minimum Vectoring Altitude). I explained that I was unable to vector and issued a low altitude alert. I advised the pilot to remain on the DP (Departure Procedure) if able. Aircraft was above EOVM (Emergency Obstruction Video Map) altitude, very near the airport, and on a general heading that mirrored the departure procedure and would clear the 4,000 foot MVA in a timely manner. The aircraft then turned towards the east and higher terrain. I re-issued a low altitude alert, instructed the aircraft to expedite the climb and upon reaching 4,000 ft., turn to a heading of 270. The aircraft reached 4,000 ft. and turned westbound. I put the aircraft on course and notified management. Reports from other aircraft indicated the VORTAC was functioning. I was instructed by management that I should have issued a vector to the aircraft below the MVA because it was an emergency. I was talked to and warned to be more cautious and issue headings when a pilot asks for them when they are below the MVA. I did the wrong thing by issuing a low altitude alert. A vector below the MVA would have been more appropriate in this situation. I will learn from this situation. I consider myself fortunate for not being disciplined officially and am grateful I was only "talked to" about this egregious lapse of control judgment.

Synopsis

A TRACON Controller reported an aircraft flying an Obstacle Departure Procedure reported not receiving the VOR while still below the Minimum Vectoring Altitude. The Controller reported Supervisors told the reporter they should have vectored the aircraft while below the Minimum Vectoring Altitude.

ACN: 1832950 *(13 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 14000

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ1
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 4 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Descent
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZZZ
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Airspace.Class E : ZZZ

Person

Location Of Person.Facility : ZZZ.ARTCC
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4
ASRS Report Number.Accession Number : 1832950
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Time Pressure
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person : Air Traffic Control
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I had just taken over as [Sector] Controller 2 minutes prior to this event. Aircraft X was talking to ZZZ Approach on the ZZZZZ arrival. The previous [Sector] Controller had coordinated this aircraft stopped at 14,000 due to another emergency aircraft he had worked earlier. ZZZZZ aircraft, by procedure are already issued an OPD (Optimal Profile Descent) except maintain 14,000. Aircraft Y was descending via the ZZZZZ1 arrival. The aircraft neared the ZZZ approach boundary and I had to call Approach for a hand off. The Controller asked if Aircraft Y was descending OPD to which I replied yes and asked if the aircraft was radar contact. She replied no because the aircraft was not separated from Aircraft X. These aircraft are procedurally separated. I was forced to turn Aircraft Y but as I issued the turn away from approach, the Controller accepted the hand off. As a result of this I violated ZZZ approaches airspace without a hand off. I expedited Aircraft Y to 11,000 and shipped the aircraft to ZZZ Approach. The CIC spoke to the ZZZ Approach Supervisor who stated the Controller was new to the procedures. I don't believe this alleviates the need to know basic procedures of separation before plugging in and controlling traffic. The ZZZ Controller created an unsafe situation for no reason by forcing me to turn out Aircraft Y. The procedures work fine as long as the Controller knows how to use them.

Synopsis

Center Controller reported an airspace deviation associated with a procedure that the receiving Controller may not have been understood.

ACN: 1832225 *(14 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 43000

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Flight Phase : Descent
Route In Use : Direct

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Flight Phase : Cruise
Route In Use : Direct

Person

Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 31
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 0
ASRS Report Number.Accession Number : 1832225
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1

I was relieving another controller. He was getting off position to take the CIC position. I listen to him brief. I turned up the overhead lights. Before I sat down, two aircraft were flashing. I sat down. Turned one 40 degrees right and the other 30 degrees left. My recommendations are, even though COVID is a factor of why I was distant from the sector to give both controllers room and space, I will have to get closer to see the scope to see what is going on.

Synopsis

ATC Controller reported during a position change with another controller, two aircraft entered into an airborne conflict situation. The conflict was not immediately noticed because the ATC personnel were social distancing.

ACN: 1832221 *(15 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Caravan Undifferentiated
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 12
ASRS Report Number.Accession Number : 1832221
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Workload
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Weather
Contributing Factors / Situations : Human Factors
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X was level at 10,000 feet westbound to ZZZ. The pilot asked for a block 10,000 to 12,000 feet, which I issued. Lots of aircraft were taking that same block due to weather in the area. Shortly after the minimum safe altitude warning sounded, and when I looked, Aircraft X was at 7,100 feet in a 5,000 feet minimum IFR altitude. Confused, I continued to watch and realized it was sounding because the aircraft was dropping so rapidly. Knowing something was definitely wrong I reached out to the pilot, but no response. After the aircraft went from 7,100 feet to 6,400 feet to 2,400 feet, I reached out two more times with no response. Finally, the pilot responded and requested descent to 1,000 feet and I informed them they were in a 5,000 feet minimum IFR altitude. They then canceled IFR but never descended and actually climbed to 2,800 feet. Eventually they reached 5,900 feet and requested to return to ZZZ1. A clearance was issued direct and assigned 6,000 feet which they had requested but then climbed to 7,000 feet, so I just issued 7,000 feet. The pilot was very shaken up. It sounds like a software issue? I recommend fixing that or grounding the C208′s until it is fixed.

Synopsis

A Center Controller reported a C208 rapidly descended below its assigned altitude, was not responding to ATC calls, and flew below the Minimum IFR Altitude, later the pilot established communications, climbed to a safe altitude and returned to its point of departure.

ACN: 1831646 *(16 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : FDK.Tower
State Reference : MD

Aircraft

Reference : X
ATC / Advisory.Tower : FDK
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Person

Location Of Person.Facility : FDK.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Radar : 10
Experience.Air Traffic Control.Non Radar : 2
Experience.Air Traffic Control.Supervisory : 7
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 8
ASRS Report Number.Accession Number : 1831646
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Troubleshooting
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Air Traffic Control
When Detected : Routine Inspection
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Chart Or Publication
Primary Problem : Chart Or Publication

Narrative: 1

Recently FDK completed its Runway 5/23 extension from 5,219 ft to 5,819 feet. The next chart cycle date reflected the runway/taxiway markings. As of cycle 2108, all of the FDK airport diagram and approach charts now show the runway 5/23 at 5,219 ft again. The reasoning from the airport manager was the FAA approach plate 'people' said that since they have not done an approach assessment (to be performed in March of 2022), that they would not allow the runway to be shown as extended, and the group unilaterally changed all airport/approach charts to show the runway shortened, but with a 600 feet

relocated threshold and a taxiway leading up to the new unmarked runway threshold in cycle 2108. Cycle 2107, the previous cycle, properly showed the runway's extension. Also to note, the RNAV approach that services Runway 5 has been NOTAMed NA since the completion of the runway extension. Fun to note, that the RNAV approach was allowed when the runway was shortened by about 500 feet to 4,700 feet during runway extension construction without a NOTAM showing un-coincidental glideslope/PAPI relationship. This is no longer an issue, although it was brought up by local based charter pilots as being unsafe and improper. The following instances may occur. An aircraft landing Runway 23 at night, may rightfully assume they have 600 feet past the Runway 5 threshold markings to exit at Taxiway A1, when in fact, there is no pavement past the Runway 5 threshold. This can cause a runway excursion by confusion of the actual markings and the chart diagram. Aircraft may proceed onto Runway 5 from Taxiway A1 to pull up to the 600 foot relocated threshold, causing a runway incursion. May cause pilot confusion or disorientation when a pilot lands or departs runway 5/23. Changing a diagram that does not depict the actual markings without a proper NOTAM or notification by the Tower is extremely reckless behavior and should not be tolerated as standard practice. Requested Fix: NOTAM the runway length to 5,819 feet, NOTAM to disregard the relocated threshold and revert the airport diagram and all approach charts to the Cycle 2107 depiction of the airport diagram/layout. Do not allow the FAA Approach Office to unilaterally change the airport diagram's of airports without concurrence of all related parties, and if the FAA Approach office does not have the concurrence, the office should perform a good faith effort to mitigate all safety issues.

Synopsis

FDK Tower Controller reported the runway extension which was previously charted was removed from the latest charts and will not be published until March of 2022. The reporter states this will potentially cause runway excursions, incursions and confusion for pilots.

ACN: 1831246 *(17 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Vectors
Airspace.Class E : ZZZ2

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use : Vectors
Airspace.Class E : ZZZ2

Aircraft : 3

Reference : Z
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part : Part 91
Flight Plan : VFR
Airspace.Class E : ZZZ2

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : SAT.TRACON

Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 7
ASRS Report Number.Accession Number : 1831246
Human Factors : Communication Breakdown
Human Factors : Workload
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Air Traffic Control
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X was 12 miles Northwest of ZZZ on a base heading 220 at 3,000 feet being vectored to the ILS Runway XXR at ZZZ airport. I observed an unidentified VFR target depart ZZZ1 airport climbing out of 1,700 feet southbound. At first the the target was flying away from Aircraft X but then I observed the target start a a turn to the east. I then assigned Aircraft X heading 250 anticipating the VFR target would make a turn to the north east to avoid the immediate incursion into the ZZZ Class C airspace. This caused Aircraft X to go through the final for Runway XXR and I climbed Aircraft X to 3,100 feet because the new projected flight path would be into a higher Minimum Vectoring Altitude. I then anticipated the VFR target would turn east bound once it got north of the Class C. So I took Aircraft Y off the arrival who was 10 miles north west of the airport on the downwind. I stopped his descent at 5,000 feet when I would normally descend aircraft at this phase of flight to 3,000 feet. It then became apparent the altitude adjustment wasn't going to be enough so I turned Aircraft Y to a 220 heading. The VFR target did make a turn to the east once north of the Class C climbing opposite direction into our arrival corridor at ZZZ. The VFR target did eventually contact another controller for an IFR pickup in my airspace. This event only had a positive outcome because this happens so frequently I have become overly cautious and I guessed correctly what the non participating aircraft was going to do every step of the way. I could have easily guessed wrong and could have had a dangerous situation develop into a crash. I recommend an airspace change that would extend controlled airspace over ZZZ1.

Synopsis

A TRACON Controller reported they vectored two aircraft off the final approach course to avoid an unidentified VFR aircraft which departed an airport underneath the final approach course. The reporter states this conflict occurs frequently and recommends extending controlled airspace to prevent further occurrences.

ACN: 1831234 *(18 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : MSN.TRACON
State Reference : WI
Altitude.MSL.Single Value : 8000

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZMP
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class E : ZMP

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZMP
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class E : ZMP

Person

Location Of Person.Facility : MSN.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Function.Air Traffic Control : Handoff / Assist
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1831234
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

I was working as TRACON Data for West in position of R1. I did not notice my Controller drop the tag for Aircraft X. About 5 minutes later, I coordinated a point out with Lone Rock sector control on Aircraft Y at 8,000 who would just clip our NW airspace. My Controller, being busy and trying to clean up his scope for a position transfer to me, was dropping tags on several aircraft above our airspace. He mistakenly dropped Aircraft X. A few minutes later, I was relieved of position and busy taking the position brief for R2 control position. The new R1 TRACON Data Controller took a call from Lone Rock and was asked if he talking to Aircraft X. He, of course did not know who they were talking about since the aircraft was a splat with no information. The R1 Controller asked me if I knew who that was, and I not hearing with the noise in the TRACON, said something like, 'Of course not, that was a point out', I was thinking they were talking about the point out I took on Aircraft Y. Shortly after, the R2 controller figured out the splat was one of our aircraft and took corrective action to avoid the two aircraft getting any closer. The NOTAM that was produced for departing aircraft from OSH during EAA Experimental Aircraft Association contributed to this. Expecting dozens of aircraft to pick up IFR flight over DLL VOR at the same point at the same time is inviting loss of separation. Many aircraft filed incorrectly, leading to much frequency congestion. One pilot in particular, during my following 30 minutes on the R2 scope wanted to argue with me that he filed correctly, when he didn't. Several aircraft were in Lone Rock and Dubuque sectors looking to pick up their IFR, requiring further point outs and coordination. Several aircraft required 6/10 [Flight Plan] amendments in order to gain their flight plans. Most aircraft were at same altitudes and required valuable frequency time for separation, to ensure they were at correct altitudes and separated from other IFR aircraft. In short, the EAA Air Adventure is a set up for controllers at my facility. The loss of IFR separation is almost inevitable given the volume, complexity and inherent confusion at certain heavy periods. There is probably no recommendation I can give other than tell a certain number of aircraft to pick up IFR at different points, or just have them fly VFR.

Synopsis

MSN Controller reported issued relating to the Oshkosh fly in and departure.

ACN: 1830970 *(19 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Small Transport
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class C : ANC

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Make Model Name : Small Transport
Crew Size.Number Of Crew : 1
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use.Other
Airspace.Class C : ANC

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TWR
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 13
ASRS Report Number.Accession Number : 1830970
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Human-Machine Interface

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Aircraft X arrival to ZZZ1 and Aircraft Y ZZZ departure were in direct conflict. An IFR release was received from ZZZ2 approach for Aircraft Y and after Aircraft Y was airborne Aircraft X's data tag was in view on the edge on my radar screen. I advised ZZZ tower on the situation immediately then passed traffic to Aircraft Y. As the collision advisory appeared a traffic alert was issued where the pilot immediately got the traffic in sight and asked what direction to go. Aircraft was on an IFR departure climb below the MVA (Minimum Vectoring Altitude) so I advised the pilot left or right turn at pilot's discretion. Aircraft Y turned to avoid. I don't know the current visual aids used by approach for release availability to each facility but I'd advise that their visual aids should be made more effective. A radar software update to where ZZZ1's instrument final turns red if someone has been cleared for the approach would give ZZZ [Tower] better situational awareness and be a home run in terms of ensuring this doesn't happen again. ZZZ controllers standard radar setting does not allow for view of ZZZ1 instrument arrivals much farther out then 10 mile final but we can always see the final and a change in its color would be noticed.

Synopsis

Tower Local Controller reported a departing aircraft was in conflict with arriving traffic under TRACON control. The reporter advised the departing aircraft who then took evasive action while below the Minimum Vectoring Altitude.

ACN: 1830963 *(20 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Altitude.AGL.Single Value : 700

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 900 (CRJ900)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi
Route In Use : None

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : zzz.twr
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 32
ASRS Report Number.Accession Number : 1830963
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Human-Machine Interface

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Ground Incursion : Runway

Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
When Detected : In-flight
When Detected : Taxi
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

SWAP night at ZZZ (Severe Weather Avoidance Plan). I had just arrived at work for the mid and taken over the two local positions from the outgoing controller. I settled in and started working the traffic and Aircraft X was one of the first few aircraft I cleared to land after taking over the position. It was VFR conditions after weather that had impacted the airport earlier had moved well out of the area. Everything seemed routine except it was busier than usual due to the weather delays as traffic was landing and departing on parallel runways. Ground Control was open and working the outbound departures to runway XXL. At ZZZ, traffic must cross runway XYR in order to access runway XXL because the runways are staggered. Ground control was taxiing Aircraft Y on taxiway 1 and I learned afterward that the aircraft was instructed to hold short of runway XYR. As Aircraft X was approaching runway XYR (our arrival runway) I noticed the taxi light on Aircraft Y was still illuminated and the aircraft seemed to still be in motion. I quickly scanned the ASDE-X (Airport Surface Detection Equipment) and as I looked up, Aircraft Y's data tag started to flash. I issued a go around clearance to Aircraft X as soon as I saw that Aircraft Y was not going to hold short. The ASDE-X did issue a go-around alert, but I had already been issuing the go-around clearance. I climbed Aircraft X to 3,000 feet on runway heading. As Aircraft X was starting into a stable climb, I issued a turn to a 300 heading away from the traffic departing runway XXL that had been cleared on a 245 heading prior to the go around and was already on departure roll. Aircraft X was then switched back to approach control for resequencing and landed about 10 minutes later without incident. Aircraft Y was then issued a runway crossing clearance by Ground Control and instructed to contact the Supervisor in the TRACON once the aircraft was parked on a taxiway. No recommendations. In a telephone interview with the flight crew by the Supervisor, it was learned that the crew was confused by the lights (ZZZ has wigwags at all the hold short lines and it is unmistakable where to stop for the runway) and failed to stop at the hold short line on taxiway 1.

Synopsis

A Tower Local Controller reported issuing a go around instruction to a landing aircraft after noticing another aircraft crossing the runway hold short lines.

ACN: 1830956 *(21 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 6000

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Amateur/Home Built/Experimental
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Descent
Route In Use : Vectors
Airspace.Class C : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6
ASRS Report Number.Accession Number : 1830956
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

Aircraft X had been on radar vectors for the ILS RWY XX approach at ZZZ1. They were on H [Heading]180, and then I turned them left H080, maintain at or above 5,000 feet until established on the localizer, and cleared ILS RWY XX approach. I watched Aircraft X turn towards the localizer, he had a good read back, and was descending out of 067. Shortly after I saw them through the localizer still on H080 and at 052. I advised them they flew through the localizer, and turned them first H030, then H020 to join but quickly realized that they would not turn before the entered an adjacent 060 MVA [Minimum Vectoring Altitude]. I issued a low altitude alert and advised they climb to 060 immediately. When they got to the MVA I vectored them back to the localizer. I asked if the pilot had received the localizer, and he responded affirmative. On the next attempt, I kept them at 060 and asked to report established. They flew through the localizer again, and said they were not receiving it and requested the RNAV RWY XX. I vectored them to final for the RNAV RWY XX, and they were able to establish on final and I cleared them for the approach. Leading up to this event, our facility had just finished working our cargo arrival rush, and traffic had slowed significantly. I was on West Radar, but then got the East Radar controller off position and worked them combined. After a period of about 30 minutes, traffic had built up to moderate levels and moderate-high complexity. This was due to wildfire smoke in the area, and nearly all aircraft being IFR. Our visual separation LOA with ZZZ2 was turned off, and I was staggering approaches between ZZZ2 and ZZZ, and also had a 3 aircraft sequence into the ZZZ1 airport, which has a temporary fire tower in operation. This caused multiple inbound calls via landline for the 3 arrivals. I had a high workload with multiple shout line coordination's from ZZZ3, ZZZ ATCT, and ZZZ2. The FLM was helping with my strips, and another controller came in and after the traffic had slowed a little we split the positions again. It was during this cool down period that the MVA violation happened. The 2 aircraft ahead of Aircraft X both flew the ILS [Runway] XX without issue. When I turned and cleared Aircraft X for the approach, he was in a good position to join final and was descending well, and I remember I was not concerned about them intercepting the localizer. I had been watching my strips print out, and realized it was going to get a little busy but wouldn't be a big deal. However, a military aircraft departed ZZZ2 into the radar pattern, and we got a divert from ZZZ4 to ZZZ1, and some of the coordination's that happened were unforeseen. I just didn't recognize how busy I would become in time to ask for help before traffic became difficult. Of course I will be more diligent in my scan and also recognizing overload situations and ask for help sooner. I think just having Hand-off staffed would have alleviated the overload, and my scan would likely have been better without such a high peak of workload followed by the lull of less traffic. I will also consider vectoring to a longer final and having aircraft join at 060 instead of 050.

Synopsis

A TRACON Controller reported an aircraft instructed to intercept the localizer flew through the localizer twice, once resulting in flight below the Minimum Vectoring Altitude.

ACN: 1830406 *(22 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Skylane 182/RG Turbo Skylane/RG
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Cruise
Airspace.Class E : ZZZ3

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Make Model Name : SR20
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Climb
Route In Use : Vectors
Airspace.Class E : ZZZ3

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Location In Aircraft : Flight Deck
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 15
ASRS Report Number.Accession Number : 1830406

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.ATC Issue : All Types

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Aircraft

Narrative: 1

Aircraft X departed ZZZ IFR initially assigned 040 heading and 4,000 altitude. Pilot checked on, was identified, handed off and shipped to ZZZ1 Approach having reported established on the airway northbound. Aircraft Y was cleared for the RNAV30 approach at ZZZ and issued direct ZZZ2 (roughly 010) climbing to 4,000 feet on his missed. He was switched to advisory. Aircraft X experienced a total electrical failure. He lost comms and transponder. Pilot elected to return to ZZZ VFR. I was unaware of his intentions and had only a primary only target on his aircraft. When Aircraft Y checked on, I stopped Aircraft Y at 3,000 feet as Aircraft X's last observed altitude was 4,200 feet with an assigned altitude of 4,000 feet. Aircraft X descended into ZZZ and the altitude of Aircraft X as they passed about 2 miles lateral from Aircraft Y and whether or not he was VFR was unknown. The operation was as safe as it could be given the circumstances.

Synopsis

A TRACON Controller reported an aircraft experienced a complete electrical failure/communication loss and descended through the altitude of another aircraft while reversing course to return to their departure airport.

ACN: 1829963 *(23 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : JAN.Airport
State Reference : MS
Altitude.AGL.Single Value : 0

Aircraft

Reference : X
Make Model Name : No Aircraft

Person

Location Of Person.Facility : JAN.Tower
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 12
ASRS Report Number.Accession Number : 1829963
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

The fire alarm continues to be an issue. The fire alarm started going off, which it has gone off for years now. As I've stated before, it is a huge distraction, the fire alarm is with 10 feet of the radar scopes. I called the airport authority to tell them it was going off, there response was "Well it's not going off down here." So me not knowing if it's a real alarm or not, I executed a contingency plan after contacting my manager. This isn't a management issue either, management is doing everything they can to fix this as well. We were somewhat busy with several airplanes inbound and outbound. I don't feel comfortable being watching someone work 10 airplanes while the fire alarm is going off. This needs to be fixed. Fix the fire alarm.

Synopsis

JAN Tower Controller reported the fire alarm goes off periodically for no reason. This is a known reoccurring issue. Reporter stated not knowing if it is a real fire or a false alarm every time it goes off is an issue which causes distraction.

ACN: 1829953 *(24 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZMP.ARTCC
State Reference : MN
Altitude.MSL.Single Value : 34000

Aircraft

Reference : X
ATC / Advisory.Center : ZMP
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class A : ZMP
Airspace.Class E : ZMP

Person

Location Of Person.Facility : ZMP.ARTCC
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 4
ASRS Report Number.Accession Number : 1829953
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

I was the R-side at Sector 38 during this event. Weather had been impacting Area 6 for the majority of the night, with a solid line from the LNK area up to the FOD area in Area 5.

There was a hole that aircraft routed over OVR and LNK points west that aircraft had been deviating through, with some deviating all the way north into Area 5's airspace and then points west. The weather closed in and caused all west bound aircraft to deviate north of Area 6 into Area 5. Shortly after a few of my aircraft entered Sector 30, I was told by the Area 5 supervisor at the time that Sector 30 was overloaded and to try and keep aircraft in my area as long as possible. I had to delay giving aircraft deviations in order to keep them out of 30 as long as I could, and even had to hold 2 aircraft at their present position. Multiple other aircraft were given vectors or were descending several thousand feet to avoid conflicts with other aircraft. Then Area 5 came up with a plan to route all aircraft coming from sector 38 and 43 up over MCW direct FSD and points west. For many aircraft MCW was backtracking and turning them wrong for direction. This was happening near the boundary with 38/30 because information was not passed as to what they wanted from us fast enough. I called for a D-side early on in the stint and it was 100% necessary. Not only was the whole situation very unsafe, it was un-efficient as well. It seemed like TMU wasn't giving us any help with sending re routes out to Chicago and Kansas, so sector 38 and 43 had to re route every single aircraft we talked to during that 1-2 hour period. A plan should have been developed for the weather in case it did close in, which ended up happening, to route all OVR and LNK west bound traffic to the north around the weather. This would have at least pinned them all down to a route instead of having every aircraft asking for deviations at the last minute. Also, I felt unsafe working this stint not only because of deviations, but because we haven't been allowed to work an even remotely busy sector for the last year plus during normal operations. But when events like this happen there is no choice but to work it, so we should be able to work busier stints on a daily basis to prepare for the worst case scenarios as described above.

Synopsis

Center Controller reported issues with weather were further complicated by the TMU's reluctance to help with reroutes or flow.

ACN: 1829345 *(25 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Military
Make Model Name : Large UAS (At or above 1320 lbs)
Operating Under FAR Part : Part 91
Flight Phase : Cruise
Airspace.Class A : ZZZ1
Airspace Authorization Provider (UAS) : FAA Authorization
Operating Under Waivers / Exemptions / Authorizations (UAS) : N
Weight Category (UAS) : Large
Configuration (UAS) : Fixed Wing
Flight Operated As (UAS) : BVLOS
Number of UAS Being Controlled (UAS).Number of UAS : 1

Person : 1

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Supervisor / CIC
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6.5
ASRS Report Number.Accession Number : 1829345
Human Factors : Communication Breakdown
UAS Communication Breakdown.Party1 : Other
UAS Communication Breakdown.Party2 : Remote PIC

Person : 2

Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Function.Air Traffic Control : Supervisor / CIC
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10.25
ASRS Report Number.Accession Number : 1829353
Human Factors : Communication Breakdown
UAS Communication Breakdown.Party1 : Other
UAS Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

UAS crew called on telephone to activate UAS airspace. The CIC (Controller In Charge) answered the phone and took the request. Part of the request was for airspace X and airspace Y ATCAAs (ATC Assigned Airspace) which has to be released by ZZZ1. A few minutes later the phone rang and the CIC was working aircraft on ZZZ [sector] so I took the call and it was the flight crew asking about the airspace. I informed them that I was not the person they had spoken too a few minutes ago and to restate the request. When they said they wanted airspace X and airspace Y I asked for the altitude and I heard AOA (At or Above) FL400. I then verified with the CIC that the ATCAAs were released and was given a affirmative indication. I then proceeded to clear the UAS for the ATCAAs AOA FL400. I also marked this on the flight strip. When the mid crew came in I briefed that the UAS had AOA FL400 and after the overlap left the control room. About XA35 the CIC when the clearance was issued came to me and asked what I had given the UAS and asked what I had cleared him. I told him and he said that he had coordinated AOA FL430 and not FL400. Apparently when the crew made the original request they told the CIC AOA FL430 and that was what was coordinated with ZZZ1. FL400 was coordinated when the error was discovered. I made a crucial mistake here and that was I assumed, and we know the trouble that can cause, that the crew told me the same information as the CIC and the old adage of "Trust but verify" would have prevented this event. If I had also verified the coordinated altitude with the CIC when I asked if we had the airspace.

Narrative: 2

I had been working CIC (Controller In Charge) combined with sector when a special operation called for an airspace clearance. The controllers working the sector had been busy at the time, so I had the individual call back in 10 minutes. Most of the airspace requests were usual except for the airspace X and airspace Y ATCAAs (ATC Assigned Airspace) FL430 and above. While waiting for the ZZZ2 sector to finalize clearing out the airspace for the special operation, I called ZZZ1 for the ATCAAs as requested. I ended up having to work a few aircraft when they special operation called back and the other controller took the call to issue the Special Use Airspace clearances since he had no aircraft to work at the time. I thought everything was fine until the overnight crew took over the positions and mentioned that there was a discrepancy between what I got from ZZZ1 and what the other controller cleared the special operation, by 3,000 feet (cleared at or above FL400 instead of FL430). Upon finding out, I called ZZZ1 to acquire the airspace X and airspace Y ATCAAs at or above FL400 to match the clearances. Upon asking the controller what happened, he forgot which altitudes I had acquired from ZZZ1 and just asked the special operations what they needed which he said they changed to FL400 and just cleared them those altitudes in the ATCAA instead of clarifying with me. I'm unsure if any errors actually happened as we lost our review capabilities. Only thing I can think of to

help is make a written note to hand off if needed for the special clearances instead of trying to verbally coordinate the specifics.

Synopsis

TRACON controllers reported communication problems resulting in incorrect altitudes assigned to a UAS.

ACN: 1829342 *(26 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC
Work Environment Factor : Poor Lighting
Light : Night

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Initial Approach
Route In Use.Other
Airspace.Class E : ZZZ

Person : 1

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1829342
Human Factors : Distraction
Human Factors : Workload
Human Factors : Confusion

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 471
Experience.Flight Crew.Last 90 Days : 67

Experience.Flight Crew.Type : 123
ASRS Report Number.Accession Number : 1830915
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Human-Machine Interface
Human Factors : Distraction
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Diverted
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

I took a handoff on Aircraft X, east of ZZZ1 landing ZZZ at approximately XA45Z. As he got closer to ZZZ I verified that he had the weather and NOTAMs and what approach he wanted. He requested the RNAV Runway XX from ZZZZZ, the right base T-fix. I gave him a pilots discretion descent to 7,000 feet and pointed him out to ZZZ2 approach, who was still open at the time. They accepted the point out, and I issued a crossing restriction of 6,600 feet at ZZZZZ and approach clearance once the aircraft passed the ZZZ2 Runway XY departure corridor. I switched the aircraft to CTAF once I ensured he was ZZZZZ1 inbound. A few minutes later (XB13Z approximately) the aircraft cancelled IFR while still airborne passing 3,000 feet (approximately). I stated 'Roger, IFR cancellation received, squawk VFR, freq. change approved". I then moved on to do a couple other things. Approximately XB20Z I received a call that an aircraft was 'missed approach at ZZZ, I couldn't get the lights on'. It took me a few moments to realize who was missed as I had removed strips on Aircraft X when they cancelled IFR. I asked 'calling say again', he repeated his prior statement at which point I grabbed the strip I had just marked to get the call sign. I issued Aircraft X a code, and radar identified him. It seemed to me that the pilot still thought he was IFR because he was flying the missed approach procedure, but I still had to climb him to my Minimum IFR Altitude of 6,500 feet. Again, he didn't seem to grasp this fact but eventually he did so. During this he asked me if there was a way to get the lights on at ZZZ; I quickly reviewed NOTAMS to see if they were U/S (they weren't) and also reviewed the Chart Supplement to make sure there weren't any 'tricks' associated with getting the lights on (different frequency than CTAF, lights only on for part of night,

for example). There were none, they should have come on by clicking the mic on CTAF as expected. I told the pilot this, and he asked me if I had any way to turn the lights on, I responded in the negative. He then stated that he would try the approach one more time and if unsuccessful go to ZZZ2, 23 miles west of ZZZ. At this point, ZZZ2 ATCT had closed for the evening at XB00Z and I had assumed control of the airspace. ZZZ2 had a NOTAM for a runway XX/XY closure with 30 min PPR (Prior Permission Required) from XB00Z-XC30Z, and I had a strip in the bay stating as such. Runway XZ/XA was open and available. He then stated he had about 20 gallons of gas on board. I issued "maintain 6,500 until ZZZZZ, cleared RNAV-Z Runway XA approach ZZZ". When the aircraft was procedure turn inbound, I switched him to CTAF. My 'spidey sense' started to kick in at this point, so I went and grabbed the emergency airport binder and the portable phone in case I needed to call ZZZ2 airport ops if Aircraft X diverted - this happens regularly on the mid shift and ZZZ2 ops personnel are very responsive to any request. Around XA35z, Aircraft X reported airborne and requested clearance to ZZZ2 as he could not get the lights on. I radar identified him, and told him to execute the published missed approach, climb and maintain 6,500 feet. He was at approximately 3,000 feet. His voice seemed stressed and said he wanted to go direct ZZZ2. I told him unable as my Minimum Vectoring Altitude is 6,500 feet, when you level off I will have direct ZZZ2 for you. He kept tracking westbound towards ZZZ2 in a slow climb. I told Aircraft X that direct ZZZ2 is not a good idea, you are 1,000 feet below the terrain in the area, fly the published missed, maintain 6,500. I am familiar with the area, the aircraft was tracking directly at a mountain 4,393 feet tall. It is not depicted on our scopes, but ZZZ direct ZZZ2 takes one dangerously close to it, especially on a dark moonless night. I told the aircraft again I couldn't give direct ZZZ2 until he got to 6,500 for terrain, and he said 'well I'm gonna [request priority handling]' and continued tracking straight at the mountain. Again, I told him he was well below the mountaintop. At this point since [priority handling was requested], I called the Supervisor over from the watch desk. Eventually Aircraft X did climb, got to 6,500 feet and over the terrain - for the moment. I asked Aircraft X for fuel, souls on board and intentions. Again, he stated he wanted vectors for an approach to ZZZ2. I advised him Runway XX/XY was closed, but I am working on getting it open, and that any instrument approach with vectors would result in him going out to an 18 mile final due to our vectoring requirements. Meanwhile, the Supervisor showed up, I quickly explained what was going on and asked him to call ZZZ2 ops and open up Runway XX/XY for the inbound. While the Supervisor was doing this, I asked him if he needed any information for ZZZ2. He told me to standby. Meanwhile, Aircraft X had started to descend again and was getting below the Minimum IFR Altitude (MIA). The area in question is on the boundary of a 6,500, 6,000, and 4,100 MIA area. I succeeded in getting him the ZZZ2 weather, but other than that the pilot was in his own world, doing whatever he wanted to do below the MIA. I asked the pilot 'is there any information I can get you for ZZZ2 so you don't have to look it up?' I was fully prepared to give him elevation, runway, lighting, CTAF, etc data so he didn't have to be heads down looking at his [tablet] for the info. He stated firmly 'NO'. He then passed into a 4,100 foot MIA area and I issued a vector for a right base entry for Runway XY. I also issued the position of the airport. At this point there wasn't much else I could do as the pilot was charting his own course, literally. I advised the MIA was 4,100 feet and he just kept descending. The Supervisor was successful in getting a hold of ZZZ2 ops and opening Runway XX/XY. I advised Aircraft X that Runway XX/XY was open and again gave the position of ZZZ2. He could not see the airport. Aircraft X in his haste to get to ZZZ2 did not realize the tower was closed and the lights were not on. The Supervisor was still on the phone with ZZZ2 ops, they saw the aircraft circling, and activated the lighting for him. It appeared that the aircraft circled ZZZ2 and landed Runway XX. He cancelled IFR on the ground on my frequency. I don't know what could have been done to prevent this. The pilot painted himself into a corner, and it almost led to his demise. I did a bit of research, and the aircraft had originally departed ZZZ3 destination ZZZ4.

Somewhere he changed his destination to ZZZ. Looking at his ICAO flight plan info, ZZZ was his alternate for his flight plan to ZZZ4. Per the FARs he should have had enough fuel to fly ZZZ3-ZZZ4, then to ZZZ and for 45 minutes thereafter. Being a pilot myself, this seems a bit of a stretch for [that make/model aircraft]. There were plenty of viable other airports along his route to ZZZ if fuel was going to be a factor. I don't know why the pilot didn't/couldn't want to climb to get over the mountain. If one is concerned about engine stoppage due to fuel, altitude is your best friend. I think the pilot was task saturated in a mountainous, dark environment and was used to being provided approach control services in flatter terrain. He just picked out a path and did whatever he wanted to do, without listening to ATC, below the MIA. If one chooses to operate in the area ZZZ is located in it deserves more planning and caution than a typical flight. The pilot also declined my offer to provide him with ZZZ2 airport information. Had he stopped for a minute to listen, he may have gained some useful information rather than thinking 'hey, I got this'.

Narrative: 2

I was Pilot In Command of Aircraft X in on Date and Date1 and I had to [request priority handling] due to the possibility of fuel shortage at approximately XA:00 AM, Date1. My account below describes the circumstances that triggered my decision to [request priority handling]; the steps that resulted in the safe, uneventful landing of Aircraft X; and my post-flight review of trip and fuel planning. I filed an IFR flight plan from ZZZ3 to ZZZ4. Given forecasted IFR conditions at ZZZ4, I filed ZZZ as an alternate which had excellent VFR weather forecasted; an LPV approach; and is a field with which I'm familiar and experienced. I monitored weather at ZZZ4 real-time during the flight via the onboard G1000 and ADSB on my iPad Foreflight app. I noted conditions at ZZZ4 were deteriorating and consistently coming in worse than they were forecasted. As I approached I coordinated with ATC to divert to our alternate ZZZ. I was given direct to ZZZ and the flight continued to proceed unremarkably until approaching ZZZ. Upon diverting, I noted fuel quantities onboard were well in excess of requirements for ZZZ and IFR reserves. Getting closer to ZZZ, I made my requested approach (the RNAV XX an LPV approach); picked up weather at ZZZ (excellent VFR conditions and calm winds); and noted that the G1000 predicted 40 gallons of fuel upon landing at ZZZ (in excess of 2 hours of fuel). Everything was feeling good and looking good at this point. I shot the RNAV XX and pilot-controlled lighting did not activate. More specifically, a PAPI light was on, but no runway lighting came on. Having previously flown into ZZZ at night, I had a reasonable expectation of what the lighting would look like, as well as I had an expectation of bright lights that leave the pilot no uncertainty about the runway location and comfort in landing. I retried the pilot-controlled lighting a few times as I was descending with no success, and ultimately decided the PAPI light alone was insufficient, did a go around, and flew the published miss. Given climb out of ZZZ and the published hold for RNAV XX, I had a modest amount of time to replan and coordinate with ATC, which I took advantage of. I first ruled out that pilot error as a factor in activating the pilot-controlled lights, asking ATC to confirm I was using the correct frequency, that pilot-controlled lighting wasn't down via NOTAM, etc. ATC confirmed as much. I should also mention that I had a phone call with the ZZZ Fixed Base Operator Manager earlier that day. The runways at ZZZ have been under construction and only recently opened, so as an extra precaution I wanted to confirm with them that pilot-controlled lighting was operational, which they did. I then expressed to ATC my plan was to retry the RNAV XX and to go directly to ZZZ2 in the event I could not activate the lighting at ZZZ and land successfully. ATC expressed vigorous agreement. I noted with ATC that according to the fuel gauges I had about 1 hour--while lower than I expected, it is well known that the fuel quantity gauges in this type aircraft can be unreliable (especially when fuel sloshes around in descents and climbs), were likely under-reporting fuel onboard, and in any event 1 hour of fuel was still sufficient to shoot the RNAV XX and to make an approach at ZZZ2 if needed. The second

approach into ZZZ resulted again in pilot-controlled operated lighting not activating. I climbed out and began heading directly to ZZZ2 on a heading of roughly 280. I noted that fuel quantity gauges were continuing to read lower than expected (at this point I had at least one tank showing a reading "in the red range"). For the same reasons as noted above, I had good reason to believe that the fuel gauges were reading lower than their actual levels, but given the risks involved with low fuel or fuel starvation, I decided to treat these low readings at face value and act accordingly, which I did. I reestablished contact with ATC and immediately [requested priority]. ATC asked me to fly the published miss at ZZZ, but noting [my request] and my right to deviate, I elected to continue direct to ZZZ2. I loaded the RNAV XY (vectors) and intended to use its guidance displayed visually on my G1000 to aid in getting well aligned for a straight in landing on Runway XY, an 8,000 plus foot strip that was only a slight right turn from my present heading. A negotiation ensued with ATC about climb altitude (he wanted me higher; I knew from experience that we were clear of terrain, the minimum altitudes for waypoints on RNAV XY suggested I was already high enough, as well as I had synthetic vision and TAWS (Terrain Alert Warning System) onboard to ensure safety; direction of flight (I would have liked wider to get better established on XY; ATC wanted me on a heading tighter to the airport, presumably to account for his concerns about altitude); and selection of runway (XY was my preference, but that choice was briefly in doubt until ATC coordinated on the ground with ZZZ2). Complicating matters further, I expected that with clear VFR the Class C ZZZ2 airfield would be "lit up like a Christmas tree" but it turned out that the tower was closed and pilot-controlled lighting was in effect. ATC was able to coordinate with ZZZ2 staff to turn on the lights; however, at the time lights were switched on I was very high about 2,500 feet AGL and right on top of the runway. I attribute being too high and too close to the factors named above--kept too high by ATC and vectors too tight to the runway from ATC--but in any event that was where we found ourselves. At that moment, I made a split-second calculation that I could throw out all available drag (gear, flaps, and speed brakes) and make a steep descent for [Runway] XY and given the length of the runway I'd have time to level off, slow down, and land successfully. This proceeded successfully until I was leveling off over Runway XY. I noted that my airspeed was too high (began leveling off at about 150-160 knots) and I had already eaten up about a quarter of the runway. For context, I like airspeeds in the 80s as I'm coming over the fence, so 150-160 knots is way too fast. I made another split-second decision that while it was probable that I would be able to land the plane in those conditions it was unlikely I could do so without running off the runway, damaging the aircraft and property if not worse. I peeked at the fuel gauges and noted I was showing enough fuel to make a quick traffic pattern for Runway XA and that the conditions for a safe landing on Runway XA were ideal (I could be assured of no other traffic in the pattern; the weather was severe VFR; the runway was now lit up like a Christmas tree; and I was perfectly established for an easy left traffic pattern). Landing on XA proceeded with great ease and uneventfully. While we were taxiing off the runway and to the Fixed Base Operator (FBO), I noticed as expected that the purportedly low fuel readings were returning to higher ranges more in line with my expectations. I noted fuel quantities in excess of 10 gallons in both the left and right tank when I shut the aircraft down, which is in excess of one hour of fuel. After getting a few hours of sleep, I returned promptly to ZZZ2 the next morning. I turned on the G1000 to get a fuel reading. It showed 11 gallons in the left tank and 9 gallons in the right tank, well in excess of an hour of fuel. I had the FBO top off the aircraft's main tanks (60 gallons capacity each for 120 gallons total; I did not have them top off the two 10 gallon extended range tanks). The top off resulted in 94.3 gallons, meaning that the aircrafts tanks held 25.7 gallons (120 gallons - 94.3 gallons) when it landed at ZZZ2. All plausible readings of actual fuel onboard, in other words, vigorously confirm that the aircraft landed with well over one hour of fuel onboard (exceeding regulatory required minimums) and point to inaccuracies in the fuel quantity measurement system as the likely root cause of the apparent fuel [situation] we

experienced. Furthermore, I reviewed the flight planning and fuel expectations for the flight. We took off with approximately 140 gallons of fuel from ZZZ3. With conservative assumptions (normal cruise speeds, no extra helpful pushes from big tail winds, etc.), it takes a little under 90 gallons of fuel to get from ZZZ3 to ZZZ4. It takes another 30 gallons to fly all the way from ZZZ4 to our alternate ZZZ. That implies a full 20 gallons of fuel (in excess of an hour's worth of fuel). And, of course, under real-world conditions, outcomes are likely to be better. For instance, if the pilot begins to anticipate (s)he may need to divert (s)he can begin leaning the aircraft to economy settings. I've seen going to an economy setting take my normal cruise fuel burn down from about 22 gallons of fuel per hour to as low as 14-15 gallons per hour. Or, as I did, diverting to the alternate simply by paying attention to the conditions on the ground at ZZZ4 while I was enroute no doubt helped me bank some fuel that might otherwise have been misapplied. Altogether, I think the lessons from this challenging but ultimately happy and successful outcome include: Discussions with my aircraft mechanic. I understand that the aircraft's fuel quantity measurement system while well understood to be inaccurate have a few after-market upgrades that can improve reliability. Continued or perhaps additional rigor in flight and fuel planning. For instance, I keep a log on each flight of any meaningful distance of the fuel onboard. Every time I switch from one tank to the other (which I do every half hour), I note the new fuel levels and whether those new levels are matching my expectations. For instance, if I'm burning 20 gallons per hour, I look to see that the most recently used tank has burned about 10 gallons in the previous half hour. While this is a reasonable process, I think I can explore ways to harden it further. For one, I can assign another person onboard on the flight to duplicate this process with me to reduce the possibility of human error. I'm also interested to see if there are products on the market that provide additional telemetry on fuel readings, fuel estimation, etc. with which to triangulate against the readings I get from the current system. Finally, in the very unlikely event I find myself in a similar position where I have a robust quantity of fuel onboard but know that if the fuel readings "act up" it could make the situation look like an emergency, I'll make sure to over-communicate with ATC and earlier in the process to get several steps ahead of any unlikely issues.

Synopsis

Center Controller and pilot reported that while attempting to land at a non towered airport at night the runway lights would not activate so the pilot diverted to a nearby airport. The pilot executed a missed approach to divert but did not comply with ATC instructions and flew below the Minimum IFR Altitudes.

ACN: 1829050 *(27 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 14100

Environment

Flight Conditions : Marginal

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZLC.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 6
ASRS Report Number.Accession Number : 1829050
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X departed ZZZ on the ZZZZZ departure towards ZZZZZ1. There had been 2 departures prior to the aircraft that had to deviate below my Minimum IFR Altitude for weather on the departure procedure. Before the Aircraft X departure, the D-Side had called the tower and told them that the other departing traffic had to deviate below the Minimum IFR Altitude, and recommended that Aircraft X wait on the ground, but ended up releasing the Aircraft X aircraft. Aircraft X checked on and requested a deviation out of 9500 feet. The ZZZ radar had been out of service prior to this departure, but must was returned to service just as Aircraft X was departing at I was able to ID him out of about 8500 feet. I informed the pilot that I could not give a vector until he was out of 11000 or 12000 feet. When the pilot was above the terrain I started to give vectors to the N-NW, trying to keep the pilot in a low Minimum IFR Altitude, but also avoiding the weather. At one point I gave the pilot a 330 heading, which turned him into my 14700 foot Minimum IFR Altitude, when they were at 14100 feet. I realized my mistake and issued a low altitude alert and told the pilot to expedite the climb through 14700 feet. He responded that he was already climbing through 14700 feet. I let the pilot continue to climb above remaining terrain on the 330 heading and then turned him on course. Training was in progress on the d-side during this event. Don't depart aircraft when there is weather in the departure corridor. Give ZZZ Tower a tower radar display so they can have weather depicted to them.

Synopsis

A Center Controller reported they vectored an aircraft below the Minimum IFR Altitude while trying to assist them in avoiding weather.

ACN: 1829049 *(28 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Altitude.MSL.Single Value : 5700

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Airspace.Class B : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : zzz.tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 8
ASRS Report Number.Accession Number : 1829049
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

I was working arrivals and departures off runway XX. Aircraft X was inbound and I was maneuvering them east of the airport for a sequence with my arrivals and departures. The departure sequence was adjusted with my departure and those off other runways which changed my plan for when Aircraft X would come in. As I quickly adjusted my plan I briefly ended up with Aircraft X in an area below the Minimum Safe Altitude and corrected that. As the departure plan changed I was in a hurry to bring Aircraft X right in and accidentally clipped a higher MSA within the bravo airspace. I was too focused on the departure plan and didn't immediately recognize Aircraft X would pass into a higher Minimum Safe Altitude. I will be more cognizant of that next time when I'm giving instructions to VFR aircraft. I will also put their altitude assignment in their scratchpad as an extra indicator of what I assigned them.

Synopsis

A Tower Controller reported they had issued instructions to a VFR aircraft in the pattern which resulted in flight below the minimum safe altitude.

ACN: 1828775 *(29 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 23000

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Military
Make Model Name : Fighter
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Descent
Airspace.Class A : ZZZ
Airspace.Class B : ZZZ1
Airspace.Class E : ZZZ

Person

Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1828775
Human Factors : Communication Breakdown
Human Factors : Time Pressure
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Aircraft

Narrative: 1

Sector XX/XY combined at XY. I had just plugged in to receive position relief briefing. Before position relief briefing took place, Aircraft X broadcast on frequency "I'm [requesting priority], lost pressure and initiating rapid descent from FL230 to 10,000." I told supervisor there was [a priority aircraft] and jumped over to D-side to start coordinating with appropriate sectors. While R-side was talking to Aircraft X, I was able to complete point outs to Sector XZ and XA, but the aircraft descended so rapidly that I was unable to complete point outs to ZZZ [TRACON] X and Y departure sectors before aircraft flew through their airspace. We completed handoff to ZZZ [TRACON] Z sector. In addition, I didn't know it was a formation flight and it was the wing man that had lost pressure and rapidly descended to 10,000 prior the lead aircraft descending to 10,000. Because it was a standard formation flight, the wing man was squawking standby and descended before turning transponder back on. I never even saw a target for wing man's aircraft. I'm sure that aircraft descended through all affected sectors before coordination was completed. I think the most helpful thing is this situation would have been for Aircraft X lead aircraft to remain with emergency wing man in descent, so we would have had a target to track. Although we probably don't [have] staffing for it, some sim training on unusual situations and emergency could be helpful. R-side was trying to give wing man a squawk code so he could have a target to track. I'm not sure if it would be better to have wing man aircraft squawk [code] or to instruct lead aircraft to descend with wing man, who was in emergency descent, so not to place additional burden on pilot.

Synopsis

Controller reported an airspace violation due to an aircraft that had a pressurization problem.

ACN: 1828551 *(30 of 50)*

Time / Day

Date : 202108
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZME.ARTCC
State Reference : TN
Altitude.MSL.Single Value : 8000

Aircraft

Reference : X
ATC / Advisory.Center : ZME
Make Model Name : Small Transport, Low Wing, 2 Turboprop Eng
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class E : ZME

Person

Location Of Person.Facility : ZME.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1828551
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I was working the R-side [Radar Controller] position on Shelbyville Low Sector 60. I was working Aircraft X who was headed to BNA. The aircraft came to me descending to 12,000

from ZTL. Per the LOA with Nashville I descended the aircraft to 8,000 [feet] and initiated the handoff to Nashville Approach. I switched the aircraft to the correct frequency. When Aircraft X was about 5 miles outside my airspace, the controller at Nashville called me to say that no practice approaches were allowed at BNA and that Aircraft X was being put on a heading of 180 and coming back to me to return to his airport. I asked the Controller what was his airport? I had no flight plan information on this aircraft, just that he was going to BNA. The Controller said he would call back. When he called back a couple of minutes later, he said there was a flight plan for a BNA departure to ZZZ. The Controller told me they put him on his new squawk code and was coming to me on that 180 heading. Nashville never entered a departure message on the new flight plan. I had to remove the flight plan on the Nashville arrival and then enter the departure message for the new flight plan. I was able to tag up the aircraft and then I had to re-clear the aircraft back to ZZZ. My main issue with this event, is that this is a very unsafe situation to just turn an aircraft and reverse his course without approval from the new sector. I had other BNA arrivals descending and I had to keep Aircraft X on the 180 heading for about 5 more minutes before I was able to put the aircraft on course. Another issue I have is the Controller at Nashville refusing to help an IFR aircraft. I get it if you are busy and cannot approve practice approaches at your airport. Nashville has 6 more airports in their airspace, maybe send someone there. Just to reverse this aircraft's course is pretty bad. How are aircraft supposed to know that no practice approaches are allowed at BNA? I have been working traffic for XX years and this had only come up in the past two weeks of me being at ZME. The area across from me, Area 6, had a similar situation a few weeks ago with an aircraft being refused to be worked by the Nashville Approach Controller and had to spin for about 20 minutes until they knew exactly what was happening. One of my fellow controllers overheard what was going on and he stated that Nashville did the same thing to him about two weeks ago as well. This time it was a general aviation aircraft that Nashville refused to have the aircraft enter their airspace, and the controller had to spin the aircraft at the last minute and he returned just back to somewhere in Alabama. In Aircraft X's case he flew from Georgia all the way towards Nashville, gets 35 miles out and is turned right back around back to Georgia. I felt bad for the aircraft that we were not able to provide a service to the aircraft. There are no NOTAMs for BNA saying anything about practice approaches. There were no comments in Aircraft X's flight plan saying he wanted a practice approach at BNA. How are these aircraft supposed to know this procedure? I am not real sure the process to help alleviate this issue. Again, how is any aircraft supposed to know about this? And how am I supposed to know this exists as I am working traffic to Nashville? There needs to be more clarification on this procedure.

Synopsis

ZME Controller reported a BNA TRACON Controller refused to let an aircraft make an approach into BNA.

ACN: 1827510 *(31 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZLC.ARTCC
State Reference : UT
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZLC
Aircraft Operator : FBO
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Skydiving
Flight Phase : Descent
Airspace.Class E : ZLC

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZLC
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use.SID : KILLY
Airspace.Class E : ZLC

Person

Location Of Person.Facility : ZLC
Reporter Organization : Government
Function.Air Traffic Control : Instructor
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1827510
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Workload
Human Factors : Situational Awareness

Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Procedure
Primary Problem : Company Policy

Narrative: 1

We were working the Radar Assist position with training in progress. Runway 02 in use at GPI, skydiving was occurring at 58S. Aircraft Y departing on the SID climbing and making a left hand turn over 58S. Traffic advisories had been given most of the afternoon between Aircraft X and departures, also GPI Tower had been advised of skydiving operations. Aircraft X started descending down into GPI and presumably switched to advisories while Aircraft Y was climbing out of GPI. Traffic was called to Aircraft Y and then Aircraft Y responded to an RA. We recommend that jump operations be moved away from the arrival and departures procedures used at GPI. Until this is done we expect further incidences between jump aircraft and GPI departures and arrivals.

Synopsis

A Center Controller reported a conflict between an Air Carrier departure and a satellite airport skydiving operator who was conducting jumps in the vicinity of charted departure and arrival procedures. The reporter stated they anticipate the same situation will become a recurring problem.

ACN: 1827504 *(32 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : BOI.TRACON
State Reference : ID
Altitude.MSL.Single Value : 9000

Aircraft

Reference : X
ATC / Advisory.TRACON : BOI
Aircraft Operator : Corporate
Make Model Name : Premier 1
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Route In Use : Vectors
Airspace.Class E : BOI

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : BOI.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 15
ASRS Report Number.Accession Number : 1827504
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X was given a descent to the Minimum Vectoring Altitude of 9,000 feet which he read back correctly. I observed him starting the descent and responded to another aircraft checking onto the frequency. The other aircraft failed check on properly so I had to query the check on information, issue a heading and an altitude to descend to. The other aircraft did not read back altitude or give a complete read back so I was in the process of getting him squared away. I then noticed Aircraft X was exiting the edge of the 9,000 foot Minimum Vectoring Altitude and descending through 8-something. He had obviously descended through the assigned altitude. He was already in the 7,000 foot (next) Minimum Vectoring Altitude so I issued a new altitude to maintain of 7,000 feet which he read back and complied with. [I recommend] proper staffing levels, [and a] standalone Supervisor in the TRACON. Had there been another set of eyes scanning as well this may have been avoided.

Synopsis

TRACON Controller reported they did not notice an aircraft descending below its assigned altitude and below the Minimum Vectoring Altitude.

ACN: 1827500 *(33 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : EVV.TRACON
State Reference : IN
Altitude.MSL.Single Value : 2000

Aircraft

Reference : X
ATC / Advisory.TRACON : EVV
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Nav In Use : GPS
Flight Phase : Descent
Airspace.Class E : ZID

Component

Aircraft Component : Air/Ground Communication
Aircraft Reference : X
Problem : Malfunctioning

Person

Location Of Person.Facility : EVV.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 5
ASRS Report Number.Accession Number : 1827500
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Primary Problem : Chart Or Publication

Narrative: 1

Aircraft X checked on approximately 30 [miles] north [of] CUL airport requesting to descend. Marginal VFR to IFR conditions in airspace. Attempted to request type approach and verification from pilot. Pilot advised they could not hear me and switched radios. The pilot switched but was broken and unreadable and when the pilot called back, I attempted to switch to standby transmitter but the pilot could only get me "2x5". I told the aircraft to proceed direct the IAF for the RNAV 18 approach at CUL. The pilot responded "proceeding direct HGOOD, cleared RNAV 18 approach." I chose not to respond to the pilot as the pilot seemed to be having difficulty possibly with radios or navigation with the weather, so I chose not to reiterate "cleared RNAV 18 approach". Moments later I observed the aircraft at 2,000 feet level direct to the IAF (not on a published portion of the approach). The MVA in the area is 2,500. I then pulled the approach plate to verify the crossing altitude at the IAF (2,100 feet) and pulled up the VFR chart located above the position to verify obstructions in the area. There were no obstructions on the route of flight above 800 feet which the aircraft was more than 1,000 feet above. I chose not to climb the aircraft and accepted the altitude as variance of what I thought was an appropriate altitude considering the following: 7110.65 4-8-5 Specifying Altitude: "Specify in the approach clearance the altitude shown in the approach procedures when adherence to that altitude is required for separation. When vertical separation will be provided from other aircraft by pilot adherence to the prescribed maximum, minimum, or mandatory altitudes, the controller may omit specifying the altitude in the approach clearance." Additionally, I was thinking of the example given in 4-8-1 for RNAV approaches of the 7110.65: "Aircraft 1 can be cleared direct to CENTR. The intercept angle at that IAF is 90 degrees or less. The minimum altitude for IFR operations (14 CFR, section 91.177) along the flight path to the IAF is 3,000 feet." After the event a controller who had seen the altitude asked what was going on with the Aircraft X from earlier at 2000. I told him the situation and what I thought was an appropriate response. He told me that he does not believe that applied to this circumstance. I followed up with two additional more senior radar controllers who agreed that an altitude should be given but didn't know what 4-8-5 was in reference to. The next morning I asked a supervisor about the scenario and asked what 4-8-5 refers to, he showed me an approach plate for ORD with multiple crossing altitudes on the approach. I asked him how he knew that this is what that paragraph referred to and he just noted experience. I would recommend clarification of 4-8-5 in the 7110.65 to be more easily understood to which scenario this applies. Additionally, in the example given in 4-8-1 for RNAV application, the use of minimum IFR altitude is confusing as this altitude could be lower than an MVA for the area. I would change this to MVA, or DVA if applicable, to ensure better understanding that a lower MIA than MVA is not acceptable on an unpublished route.

Synopsis

EVV TRACON controller reported misunderstanding JO 7110.65 approach clearance procedure which resulted in aircraft being below the MVA.

ACN: 1827473 *(34 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Altitude.AGL.Single Value : 300

Environment

Flight Conditions : VMC
Light : Night

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Fractional
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Flight Phase : Taxi
Route In Use : None

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TOWER
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1827473
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Ground Conflict, Critical
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

Aircraft X was assigned the unadvertised XYL for arrival (advertised as a departure only runway) to accommodate for the required runway inspection by airport ops after this type of aircraft arrives or departs. It's easier to stop traffic and inspect the departure runway. Aircraft Y checked on 10 to 15 miles out and I cleared them to land and advised that traffic would Line Up and Wait/depart prior to their arrival. I was very focused on my sequence because we were in weather reroute program and there were numerous in-trail restrictions over most (all?) departure fixes. I got too focused on the departures and did not appropriately scan for the arrivals progress. When I instructed Aircraft Y to Line Up and Wait, Aircraft X advised that they were going around. I responded with a subsequent go around and maintain 3000 feet shortly after followed by a 300 heading after coordinating with Local Control. Aircraft Y crossed the Hold Short Lines but not the edge line. I will add a memory aid to my personal technique to prevent this from occurring again. I plan to use an empty strip holder to conservatively predict where the arrival will fit in with my departures. For example, if the arrival is 10 miles away I would put the blank strip 2 departures back and not depart beyond the blank strip without reassessing the situation. This will force me to periodically check on the progress of the arrival to my departure runway.

Synopsis

Tower Controller reported clearing an aircraft for takeoff with another aircraft on short final which resulted in the flight crew initiating a go around.

ACN: 1827469 *(35 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Fractional
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ1
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 9
ASRS Report Number.Accession Number : 1827469
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Confusion

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft RA
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I was working two sectors combined during a west flow. We were ILS XXR and visuals to Runway XY. I was trying to lay off of Runway XY because I just didn't have time to vector and hit the ghosts. I am already busy vectoring for space to [Runway] XXR and I had a couple that I was taking to Runway XY. Aircraft X popped up from ZZZ and I just didn't have a good way to take them to Runway XXR. I decided to assign them Runway XY. All my arrivals to XXR are already descended to 6,000 feet. Aircraft X came to me at 6,000 feet and I needed to get them under my ZZZ1 arrivals. I then descended Aircraft X to 5,000 feet and didn't see the traffic in front of them who ZZZ1 was working. By the the time I noticed it Aircraft X was already responding to an RA. After coming off of a COVID-19 reduced staffing schedule a lot of A siders are a little rusty in the radar room. I think that sectors should have been split.

Synopsis

TRACON Controller working busy combined arrival sectors descended an aircraft from 6,000 feet to 5,000 feet which caused a conflict with another aircraft.

ACN: 1827217 *(36 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 3000

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Corporate
Make Model Name : Small Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Route In Use : Vectors
Airspace.Class E : S46

Person : 1

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1827217
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

Person : 2

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.TWR
Reporter Organization : Government
Function.Air Traffic Control : Coordinator
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 14
ASRS Report Number.Accession Number : 1826913
Human Factors : Workload
Human Factors : Distraction
Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Returned To Clearance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

I was vectoring Aircraft X into ZZZ for an ILS Approach. He was vectored through final and left high for VFR traffic on the localizer. He called the field in sight over the Final Approach Fix, was cleared for a Visual and switched to ZZZ Tower. He turned towards ZZZ1. VFR aircraft above 1500 feet near the localizer are a conflict because 2400 feet is the crossing altitude for the Initial Approach Fix ZZZZZ. VFR aircraft departing ZZZ or ZZZ2 Class D southbound are in a head on conflict with any aircraft on the localizer into ZZZ. IFR aircraft often end up being too high for a localizer approach because they can't descend because of VFR traffic on the localizer and they get a Visual Approach instead. It's also not uncommon for aircraft to be vectored through the final approach course to avoid traffic or descend. Both of these courses of action can disorient pilots, but there is nowhere to break them out without creating another conflict somewhere else. A few miles east of the localizer is higher terrain. An aircraft at 3000 feet within 10 miles of the airport will not be able to climb to the Minimum Vectoring Altitude in time. If the aircraft continues on a vector north to parallel ZZZ1, they could conflict with a departure off of ZZZ1, likely a prop on a 020 heading climbing to 3000 feet. ZZZ1, ZZZ, and ZZZ2 are so close to each other that it can be confusing which airport they see when they aren't able to fly a straight path inbound because of VFR conflicts. ZZZ localizer approach course need to be controlled airspace. VFR aircraft should not be able to fly on or through the localizer without talking to ATC. It's impossible to predict the actions of a VFR aircraft not on frequency. They climb, descend and maneuver around traffic they do see, sometimes making 360's.

Narrative: 2

About XA:25 PST I observed Aircraft X, who was on an ZZZ ILS Runway XXL approach, heading westbound about 2 miles east of ZZZ1. They had gone through the ZZZ final and appeared to be flying towards ZZZ1 and not ZZZ. I told the Local controller and the Cab Supervisor then called ZZZ1 Tower on the shout line advising them of the traffic and that ZZZ Tower was attempting to turn Aircraft to the north towards ZZZ. Aircraft X's data tag was then changed to Visual Approach, ZZZ VA XXL. Aircraft X landed ZZZ Runway XXL without incident.

Synopsis

A TRACON Controller and Tower Controller reported an aircraft cleared for a Visual Approach turned toward the wrong airport. Prior to the deviation the TRACON Controller had restricted this aircraft's altitude and vectored it through the Final Approach course to

avoid unidentified VFR traffic highlighting the need for restrictive airspace around busy commercial airports.

ACN: 1826902 *(37 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZJX.ARTCC
State Reference : FL
Altitude.MSL.Single Value : 33000

Environment

Flight Conditions : Marginal
Weather Elements / Visibility : Rain

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZJX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase.Other
Airspace.Class A : ZJX

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZJX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase.Other
Airspace.Class A : ZJX

Person

Location Of Person.Facility : ZJX.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11
ASRS Report Number.Accession Number : 1826902
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Distraction

Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Situational Awareness
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Staffing
Contributing Factors / Situations : Weather
Primary Problem : Company Policy

Narrative: 1

I'll start off by saying that the South Area had 6 Controllers and 1 D side trainee, but no Supervisor. The East Area had 6 Controllers and 1 Supervisor. The South Area was forced to operate while the Supervisor position was combined with the Operations Manager in Charge. While working 68, Sealord was active above my stratum for everything but W136A/B. There was a few scattered areas of precipitation around SAV, and a line west of SAV that forced the traffic between sectors 66/50 to deviate into my sector. Sector 47/48 was combined and very busy. ZDC did what ZDC does best, as they slammed the door on sector 47/48. Scrambling, the East Area begins rerouting every aircraft into ZTL. ZTL did what ZTL does best, as they then slammed the door on the East Area as well. This caused us all to put everyone into no notice holding. Like dominoes falling south, everyone stopped taking hand offs for aircraft headed towards ZDC and put everyone into holding. From here, chaos ensued. Information was limited; we had no Supervisor in the area to talk to Traffic Management Unit or the other areas to figure out what we needed to do. I basically had one hole around SAV everyone was flying through, and Sealord had the rest of my airspace. Regardless, I had to begin no notice holding. I didn't know how long this would be, so I made a plan to hold aircraft at odd altitudes in two different locations (SAV and GIPPL). My plan was to hold south at both points, so I could successfully hold a lot of aircraft if I needed to. I began by first issuing holding instructions to Aircraft X to hold south at a point just east of SAV at 33,000 feet. The next aircraft I was given was Aircraft Y at 33,000 feet. I issued holding instructions to him to hold south at the GIPPL intersection at 33,000 feet. Between every transmission of mine, I was trying to get the attention of the Supervisor in the East Area. If you listen to the tapes, you will hear me say "say again" very often. This is because it was impossible to try and get help, while also keeping up with their check ins/requests. He was the only one around that wasn't plugged in and trying to create order from the chaos. He of course was very busy (and doing well

at taking care of his own area) so it was hard to steal him away to try and figure out what was going on. At some point (I had too much going on to see the exact time) conflict alert initiated between the Aircraft X and Aircraft Y. I expected the Aircraft Y to be south of GIPPL, thus no factor for the Aircraft X when I gave the holding instructions. The Aircraft Y must have plugged in north instead of south, because he was head on with the Aircraft X. I issued traffic alerts and turns, while climbing the Aircraft X to FL340. There was a loss [of separation]. I don't know at this point if I issued the holding instructions incorrectly or if I had missed a bad read back. This could have been my mistake or it could have been a pilot deviation. Either way, there was too much chaos to catch any unexpected pilot actions. ZDC giving no notice to stop all hand offs without any kind of heads up is ridiculous and dangerous. It would be a completely different story if they had put us on alert and given us routes to issue if it happens. This also would have given ZTL a heads up and then we could have all worked together on a safe and expeditious plan. There should have been a staffing trigger tonight. Any time that is brought up, everyone freaks out and refuses to ever use the word "staffing". This happens constantly. The South and East areas having 6 Controllers a piece is not ok. Maybe this is conversation better spent as a hotline call? What is so wrong with slowing traffic due to low staffing? It is no different than getting slower service at a restaurant because they are low on servers. It's semantics, and semantics should never interfere with safety. That is our number one job after all. Tonight was dangerous and this kind of practice needs to stop. It won't though, so I'm going to stop wasting any more time. Staffing is terrible, we constantly get stretched too thin, we don't ever really have a proactive plan, we get very little support from Command Center, and sometimes that swiss cheese thing the FAA likes to tell us about comes true and then there's a loss.

Synopsis

ZJX Center Controller reported a loss of separation between two aircraft entering holding patterns. Controllers in the area were working combined sectors with no supervisor when adjacent facilities closed their airspace causing the reporter's area to have to hold aircraft unexpectedly.

ACN: 1825643 *(38 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : FLL.Tower
State Reference : FL

Aircraft

Reference : X
ATC / Advisory.Tower : FLL
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi
Route In Use : Visual Approach
Airspace.Class C : FLL

Person

Location Of Person.Facility : FLL.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 14
ASRS Report Number.Accession Number : 1825643
Human Factors : Situational Awareness
Human Factors : Distraction

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Ground Incursion : Runway
Anomaly.Ground Event / Encounter : Vehicle
Anomaly.Ground Event / Encounter : Aircraft
Detector.Person : Air Traffic Control
When Detected : Taxi
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

East operation, landing Runway 10L. Aircraft X was cleared to land Runway 10L as the aircraft began to flare over the runway the ground controller asked if I had someone on the runway. I quickly observed an unauthorized vehicle on the runway. I then Immediately initiated a go around to Aircraft X. Pilot was able to execute the go around just a few feet above the runway and before touching down. Better training for drivers operating vehicles that have to drive on or anywhere near active taxiway and runways. It was reported by the county that it was the drivers first day operating on a service road that runs parallel to an active taxiway.

Synopsis

FLL Tower Controller reported a runway incursion caused by a vehicle entering the runway while an air carrier was flaring to land.

ACN: 1825642 *(39 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ASE.Airport
State Reference : CO
Altitude.MSL.Single Value : 11500

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ASE
Make Model Name : Helicopter
Crew Size.Number Of Crew : 1
Flight Plan : VFR
Flight Phase : Cruise
Route In Use : None
Airspace.Class D : ASE
Airspace.Class E : ZDV

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ASE
Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Initial Climb
Airspace.Class D : ASE

Aircraft : 3

Reference : Z
ATC / Advisory.Tower : ASE
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Taxi

Person

Location Of Person.Facility : ASE.Tower
Reporter Organization : Government
Function.Air Traffic Control : Other / Unknown
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1825642
Human Factors : Workload
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X flew through the Arrival and Departure Areas at 11,500, not talking to ATC. The helicopter came in direct conflict with Aircraft Y on the LINDZ9 departure. The Controller had to expedite climb and rates of turn. The conflict alerts went off on the radar. Aircraft Z was delayed on the ground after, while the helicopter was in the departure area in unsafe proximity to the LINDZ9 track. Aspen has very specific IFR routes that we are allowed to use with the mountains and high MVAs. When VFR aircraft fly through the departure and arrival areas, it is unsafe if we aren't talking to them to verify altitude, intentions and control them to avoid conflict. Aspen needs a Class C Airspace or ARSA to require two way radio communication with VFR's.

Synopsis

Aspen Tower Controller reported a problem with a helicopter and traffic departing Aspen.

ACN: 1825639 *(40 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ASE.Airport
State Reference : CO
Altitude.MSL.Single Value : 13000

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ASE
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Cruise
Route In Use : None
Airspace.Class D : ASE
Airspace.Class E : ZDV

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ASE
Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Descent
Route In Use : Vectors
Airspace.Class D : ASE
Airspace.Class E : ZDV

Aircraft : 3

Reference : Z
ATC / Advisory.Tower : ASE
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Descent
Airspace.Class D : ASE
Airspace.Class E : ZDV

Person

Location Of Person.Facility : ASE.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Other / Unknown
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1825639
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X was VFR, flew through the departure area at 13,000, where aircraft climb to 16,000 then through the final at a point where arrivals cross through that altitude on descent. Aircraft Y had to be vectored off the approach path to avoid conflict. Aircraft Z had to be kept higher than normal to avoid the conflict and was high entering the approach, making it difficult to get to the airport. Aspen has the difficulty of high mountains and high MVA's, aircraft have limited availability to stop climbs, descents on final are through narrow corridors and the approach path is steep. VFR aircraft not in communication with ATC are a safety risk because we cannot know their intentions, verify altitude or issue control instructions to avoid conflict. Aspen needs controlled airspace that requires 2 way communication.

Synopsis

Aspen Tower Controller reported problems associated with aircraft in relationship to the high terrain and high MVA's surrounding the airport.

ACN: 1825635 *(41 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZDV.ARTCC
State Reference : CO

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZDV
Aircraft Operator : Air Carrier
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part : Part 121
Flight Plan : IFR
Airspace.Class A : ZDV

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZDV
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class A : ZDV

Person

Location Of Person.Facility : ZDV.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2
ASRS Report Number.Accession Number : 1825635
Human Factors : Communication Breakdown
Human Factors : Workload
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Ambiguous

Narrative: 1

For the east arrival push into DEN, beginning around XA:00 and lasting until sometime after XB:30, Sector 9 and Sector 16 became over-saturated and unsafe. The numbers in these sectors had been forecasted to be well over MAP (Monitor Alert Parameter) numbers for some time prior to the sectors going red. Management and TMU were alerted to the upcoming situation. Compounding the very high volume was the complexity in the sectors. Denver Approach restricted our arrival gate to one route with 5 miles in trail. ZMP was asked by TMU to provide us 2 routes with 10 miles in trail per route. ZMP offloaded arrivals from the LAWGR arrival to the AALLE arrival to help accomplish this despite the fact that LAWGR was the only arrival we were permitted to use going into approach. Sector 9 was then tasked with rerouting all AALLE arrivals and blending them with the existing LAWGR stream. While trying to accomplish this they had a high volume of deviating overflight traffic due to weather on the southern boundary of the sector. Sector 9 did the best they could but began to fall behind. This resulted in a Denver feed entering Sector 16 that was falling apart at the boundary of sectors 16 and 9. Sector 16 also had a volume issue that was alerted well prior to the over-saturation. Sector 16 then became overwhelmed with trying to manage the volume of traffic while also trying to reestablish the Denver arrival sequence. The safety of the NAS was severely compromised due to a lack of planning when it was obvious early on that traffic volume was going to be well over the limits of these sectors during a highly complex time. Aircraft should have been routed around or below these sectors to alleviate unnecessary volume and complexity. Some aircraft were routed around the sectors and the answer from TMU and management about the oversaturation was "there could have been more airplanes, but we routed some around." This answer is unacceptable. More effort should have been made to make sure the volume and complexity did not get to the point where controllers were overloaded and unsafe. In the end, multiple Denver arrivals ended up being routed to the northwest arrival gate because the controllers on Sectors 15 and 16 could not get them sequenced in. This increased workload for Sector 33 who also had his own traffic to handle. Sector 16 had to refuse hand-offs and point-outs due to saturation. When Center is restricted by TRACON to one route for arrivals, all involved Centers need to be under the same understanding. It increases workload and complexity to change aircraft to another arrival for stream balancing for both pilots and controllers. The aircraft that were switched to the AALLE arrival in ZMP airspace were subsequently switched back to their original arrival and re-sequenced upon entering ZDV airspace. When the TFMS alerts Management and TMCs that a sector will be well over negotiated safe MAP numbers for a session, a plan needs to be put in place. Aircraft need to be rerouted or sent to an altitude to avoid overloaded sectors. The high volume in sectors that were already being asked to handle a higher than normal complexity due to weather and sequencing or rerouting constraints became very unsafe. TMCs in conjunction with management should have made sure that the volume in those sectors never exceeded limits.

Synopsis

ZDV Center Controller reported the Monitor Alert Parameter numbers for two sectors became over-saturated and unsafe.

ACN: 1825634 *(42 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : SAT.Tower
State Reference : TX
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : SAT
Make Model Name : Learjet 60
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Descent
Airspace.Class E : ZHU

Aircraft : 2

Reference : Y
Aircraft Operator : Personal
Make Model Name : Sail Plane
Crew Size.Number Of Crew : 1
Flight Plan : VFR
Mission : Personal
Flight Phase : Descent
Flight Phase : Climb
Flight Phase : Cruise
Airspace.Class E : ZHU

Person

Location Of Person.Facility : SAT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 15
ASRS Report Number.Accession Number : 1825634
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Air Traffic Control

When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1

I was working final sector. I had a LJ60 arrival from the west coming to SAT, I descended the LJ60 to 4,000 feet. When the LJ60 was about 20 miles from SAT I noticed a primary target pop up with no altitude about 5 miles apart. I clicked on the target and noticed it was squawking 1202, which for us is an indicator that it is a glider. I issued traffic and turned the LJ60 to a 090 heading to avoid the maneuvering glider at 5C1. As fate may have it, the primary tracked directly in to and merged with my LJ60 on final. I was basically praying to the gods that this glider was not at 4,000 feet as I frantically issued traffic. Fortunately the LJ60 never saw the glider and landed safely. On a different date I was watching the Final Controller on APW [Approach West] work around multiple aircraft coming in and out of 5C1 squawking VFR flying through air carrier arrivals into SAT. There was also a glider there maneuvering again with an intermittent transponder. They were flying up to 5500 feet and below, our arrivals are 6,000 feet and below. The Final Controller was issuing traffic and playing guessing games as to what these VFR aircraft, gliders, 15 miles from SAT runway final, were going to do. Extend the Class C all around 5C1 or create Class B to protect SAT finals. 5C1 has been an issue for a long time, enough is enough.

Synopsis

A SAT TRACON Controller reported two instances of jet aircraft on final approach to SAT conflicting with gliders maneuvering into and out of a non-towered airport (5C1) located underneath the final approach course.

ACN: 1825628 *(43 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZJX.ARTCC
State Reference : FL

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZJX
Aircraft Operator : Air Carrier
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Airspace.Class A : ZJX

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZJX
Aircraft Operator : Air Carrier
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Airspace.Class A : ZJX

Person

Location Of Person.Facility : ZJX.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Traffic Management
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 19
ASRS Report Number.Accession Number : 1825628
Human Factors : Workload
Human Factors : Troubleshooting

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

I was working the Traffic Management position. I saw that we were going to have a couple of hours of high volume in the Center, as is normal on a day shift. I received a briefing from my fellow Traffic Management Coordinator (TMC) in which he relayed that the Central Weather Service Unit (CWSU) had informed him we could expect to lose the East Coast routings through the state of Florida by XA:00Z. The Atlantic Routes, which normally service much of our volume between the Northeast and South Florida were closed due to weather. Sealord was planning to activate all airspace to FL500 and the Joint Air Traffic Operations Command Center (JATOCC) was planning to activate W470 to FL600. This would mean we would be left with one hole through which we would be forced to route all aircraft. I called the Severe Weather line at the Air Traffic Control System Command Center (ATCSCC) and voiced my concerns and that I thought our best option would be to put an Airspace Flow Program in place to slow the volume through ZJX due to the lack of available airspace and the increased complexity caused by the weather. I was told we didn't need that because there was not enough volume. The weather built up, much as anticipated. Planes were deviating all over the sky. I received a phone call from Severe Weather wanting to put out a playbook routing for ATL landing traffic in response to my request to ZMA via the National Traffic Management Log (NTML) to route all aircraft on the HOBTT Arrival to keep them off of the east coast. I told them that at this point it was better to handle it tactically and reiterated that if they had helped me slow the volume on the East Coast earlier, we wouldn't have to ask ZMA to reroute aircraft. This was disregarded. To my understanding, the East Area got absolutely overwhelmed and had sectors so inundated with aircraft that they were almost out of control. We also have repeated issues with ZTL either refusing to comply with requests they have accepted or flat out refusing to accept them at all and arguing with us. Lately they have begun to send retaliatory restrictions that they don't actually need in response to our requests to tuck aircraft due to tunnel procedures necessitated by severe weather. I would recommend that the FAA and ATCSCC realize that the traffic flowing through ZJX has increased drastically and our Controllers are consistently working Level 12 traffic day in and day out. We have severe weather literally every day between May and October which shuts off routings. Most days, unless it is a holiday, military airspace is active on both sides of our airspace, making much of our airspace unusable. Many days we are unable to split sectors off or provide a radar associate or tracker to assist the controllers. Every single time we call the ATCSCC for assistance we are denied. It is a rare occasion that an Airspace Flow Program (AFP) or structured routing is actually issued to help us as we attempt to funnel over 100 aircraft per hour through holes in thunderstorms and active military airspace. We are seeing increasing reports of severe turbulence as we force aircraft full of people through small holes in between severe weather cells. Our facility has been subject to numerous Corrective Action Plans regarding severe weather events as a result of us sending them through severe weather. Controllers are expected to call depicted weather to each and

every aircraft, and are reprimanded when they are unable to, however their workload is completely absurd at this point and when we try to help slow the volume to provide them with more time for additional duties beyond separating the aircraft deviating to avoid weather we are denied! Sealord calls their airspace active to FL500 early most days and keeps it active until well into the evening, as do the military squadrons who utilize the warning and restricted areas on the Gulf Coast. As a TMC I am forced to watch sectors become saturated to the point Controllers are overwhelmed after I have initiated the Traffic Management Initiative (TMIs) at my disposal to slow it. This situation in unacceptable and has to change. I have been a Controller for XX years, X of those as a TMC, and I have never seen it so bad. People are working this intense traffic 6 days a week every week, often 10 hours a day, and they are burned out. They don't have any more to give and the system is failing them as they continue to work under adverse conditions to maintain the world's safest and most efficient system that the FAA and NATCA are so proud of.

Synopsis

Jacksonville Center Traffic Management Coordinator reported asking the Command Center for help and was denied. This resulted in the East Area getting overwhelmed and sectors becoming so inundated with aircraft that they were almost out of control.

ACN: 1825624 *(44 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SCT.TRACON
State Reference : CA
Altitude.MSL.Single Value : 1200

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Initial Climb
Airspace.Class D : SMO

Person

Location Of Person.Facility : SCT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 8
ASRS Report Number.Accession Number : 1825624
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Time Pressure
Human Factors : Situational Awareness
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I took the position with a Cessna that had just departed SMO airport. At around 1200 feet he made a right turn back to the VOR. I immediately told him to stop his turn and turn back on to the departure heading. He said he was given a 250 heading. I pulled up the MVA (Minimum Vectoring Altitude) map and decided that because of his low altitude and position, it was better to let him continue his right turn into a lower MVA rather then try to put him back to a left turn leading to a higher MVA. I then told him to expedite his climb as he was now below the MVA. I asked him who gave him a heading to the VOR and he said the tower did. The Supervisor checked with the tower and they listened to the tapes and he was not given a turn to the VOR. I was then told to brasher the pilot and I did. No low altitude alert ever went off on the scope. We've had many occurrences of pilots turning incorrectly off of SMO airport. I would suggest the departure procedures be revisited as there are a lot of inexperienced pilots that depart from there. If this many are having issues, it should be addressed.

Synopsis

A TRACON Controller reported a departing Cessna deviated from the departure procedure and flew below the Minimum Vectoring Altitude.

ACN: 1825015 *(45 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 11000

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Approach
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6
ASRS Report Number.Accession Number : 1825015
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I was working and had just arrived to start my shift. I had been working the sector less than 10 minutes when I cleared Aircraft X to cross ZZZ at or above 14,000 ft. and issued an approach clearance for the ILS approach. The pilot read back a crossing restriction of 11,000 ft., which I did not catch. I was relieved from the position for a break, and after leaving the control room I was told that [the flight] had descended below the MIA (Minimum IFR Altitude) prior to reaching ZZZ and was issued a low altitude alert. I do not have any recommendations.

Synopsis

A Center Controller reported a flight crew descended below the minimum IFR altitude after he missed the crews incorrect read back of the assigned altitude.

ACN: 1823740 *(46 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAX.Airport
State Reference : CA
Altitude.AGL.Single Value : 0

Aircraft : 1

Reference : X
ATC / Advisory.Tower : LAX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Takeoff / Launch
Route In Use : None

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : LAX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi

Person : 1

Location Of Person.Aircraft : X
Location Of Person.Facility : LAX.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 3
ASRS Report Number.Accession Number : 1823740
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Aircraft : X
Location Of Person.Facility : LAX.Tower
Reporter Organization : Government

Function.Air Traffic Control : Handoff / Assist
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1.5
ASRS Report Number.Accession Number : 1823730
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Runway
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
When Detected : Taxi
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

Aircraft Y had just landed and was instructed to hold short of H9 on H to protect for other arrivals that might exit at H9. When I was ready, I taxied Aircraft Y up to hold short of 25R at l. However, Aircraft Y didn't respond. I called him 3 times with no response. I cleared Aircraft X for takeoff on 25R. My assist asked ground control to see if Aircraft Y had switched frequencies and was just about to call approach to see if Aircraft Y had got back to that frequency when we saw Aircraft Y taxiing forward. I called Aircraft Y and verified he would hold short of Runway 25R which he read back with his call sign. Shortly after my assist said "He's not going to stop!" Momentarily I didn't believe it but quickly went to Aircraft Y and told him to stop. I then immediately cancelled Aircraft X takeoff clearance. Aircraft Y did stop with their nose about at the runway edge. Aircraft X was about at B2 when I cancelled their clearance. Aircraft X was already stopping before ASDE-X (Airport Surface Detection Equipment) alarmed. Aircraft X taxied back for departure and I crossed Aircraft Y. Maybe I shouldn't have departed Aircraft X with Aircraft Y not responding.

Narrative: 2

Aircraft Y was holding on taxiway H short of H9. Aircraft X was told to Line up and wait Runway 25R. Aircraft Y was then told to turn left at H and Hold Short Runway 25R. There was no response from Aircraft Y. The instruction was repeated again to Aircraft Y but still no response. I on Local Assist went to Ground Control to see if they had Aircraft Y on frequency which they did not. I noticed Aircraft Y start moving. Local Control reached out again with and repeated Hold Short Runway 25R. This time Aircraft Y responded and gave a good read back of Hold Short Runway 25R. Aircraft X was cleared for takeoff and started the departure roll. I first noticed that as Aircraft Y was turning at taxiway Lima approaching the hold bars it did not look like they were stopping, and verbal said that. I immediately said again that Aircraft Y is not stopping. Local Control told Aircraft Y to hold position and canceled the takeoff clearance for Aircraft X as they were between B3 and G. Two seconds later the Airport Surface Detection Equipment alarm went off for the occupied runway alert. Aircraft X exited Runway 25R at B4 and taxied back for departure. Aircraft Y continued the cross and went to parking. I don't know what to recommend to prevent this

from happening again as all the protocols were followed with correct read backs. I do not know if the Runway Stop Lights were working properly. I know there were issues with that system in the past with the red lights turning off early. But since it was daytime and Lima is not in a direct line of sight for those lights, I cannot know if the system was functioning properly.

Synopsis

LAX Tower Local Controller and the Local Assist Controller reported an aircraft which had been instructed to hold short of the runway taxied on to the runway at the same time a departure was beginning their takeoff roll.

ACN: 1823728 *(47 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : LAX.Airport
State Reference : CA
Altitude.AGL.Single Value : 0

Aircraft : 1

Reference : X
ATC / Advisory.Ground : LAX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi
Route In Use : None

Aircraft : 2

Reference : Y
ATC / Advisory.Ground : LAX
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi
Route In Use : None

Person

Reporter Organization : Government
Function.Air Traffic Control : Instructor
Function.Air Traffic Control : Ground
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 3
ASRS Report Number.Accession Number : 1823728
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Situational Awareness
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Taxiway

Detector.Person : Air Traffic Control
When Detected : Taxi
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Airport

Narrative: 1

I was providing on the job training on Ground 1 when the following event happened. Aircraft X exited [Runway] 25R at J and was instructed to "taxi via B, L, hold short of K1 and contact City Ramp." Aircraft X read back the instruction correctly. The developmental made two more calls and in the meantime Aircraft X started to turn from B onto K...one taxiway earlier than instructed. I pointed out the error to the developmental and then the developmental immediately told Aircraft X to stop. (Background: K & L are now City Ramp controlled and the only entry point to the ramp without additional coordination is via L short of K1.) We explained to Aircraft X that they were prematurely turning into the ramp and not following the issued route. Aircraft X responded by saying they had received clearance to continue on K short of K2, however we had never mentioned anything about K/K2. The Controller in Charge coordinated with the City Ramp via the phone and verified that it was safe for Aircraft X to continue northbound on K. Additionally, while this entire scenario was unfolding, Aircraft Y deviated from their taxi clearance (B, K, C, Northroute) and turned onto L. I overkeyed the developmental and told Aircraft Y to "hold short of K1 and contact the ramp." After the training session, I reviewed the tapes for both Aircraft X and Aircraft Y's instructions/readbacks. There were no discrepancies with either--each pilot responded correctly and timely to the developmental's instructions but failed to comply. I am writing a report about the operation of this "LAWA City Ramp" because it continues to cause unsafe proximity events. While I was previously under the impression that the majority of the errors were due to pilot expectation bias and over reliance on familiarity (the old Northroute was on K/L), I now believe that the instructions of the Ramp Tower personnel contributed to Aircraft X's deviation today. See below: When we told Aircraft X that they turned too soon, their response was "we had further clearance to continue via K short of K2." It is my belief that Aircraft X called the City Ramp on their second radio while taxiing westbound on B and the ramp personnel instructed them to continue via K short of K2. Aircraft X understood this as a complete change from the instructions we provided and began to turn on K early. If this is approximately what happened, then it needs to be remedied immediately. It's unsafe to have non-ATC personnel issuing instructions to aircraft that could be confused with new or amended instructions for how to taxi/proceed on the movement area. The ramp personnel need to clearly define to inbound aircraft that the previous clearance remains the same, but once on L short of K1, they may continue, hold, etc. Additionally, this is about the actions of pilots that turn early onto L/K when they correctly were issued and read back "the Northroute." I previously stated that "I'd recommend additional signage, a change to the charts, or added emphasis in the text of the "Northroute" that emboldens how N is now the Northroute, not K or L. Or all of the above," and my sentiments still remain. I believe there was one small change to the Jeppesen map that tried to highlight the new ramp area but bolding the Northroute and re-emphasizing that N is the Northroute could also help prevent this occurrence.

Synopsis

LAX Ground Controller reported ongoing issues relating to poor signage at the airport.

ACN: 1823717 *(48 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : HLN.TRACON
State Reference : MT
Altitude.MSL.Single Value : 12000

Aircraft : 1

Reference : X
ATC / Advisory.Tower : HLN
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class E : ZLC

Aircraft : 2

Reference : Y
Aircraft Operator : Corporate
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Cruise
Route In Use : None
Airspace.Class E : ZLC

Person

Reporter Organization : Government
Function.Air Traffic Control : Local
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2
ASRS Report Number.Accession Number : 1823717
Human Factors : Distraction
Human Factors : Workload

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Vertical : 400
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Environment - Non Weather Related

Narrative: 1

Aircraft X was IFR, level 120, and eastbound. Aircraft X reported Aircraft Y, four hundred feet above, opposite direction, crossing directly above. It was not confirmed, but the pilot believes the Aircraft Y climbed to avoid Aircraft X at the last minute, thus passing above by 400 feet. Aircraft Y was VFR and not talking to any HLN controllers. Aircraft Y later checked on with LC after the conflict was over. There was no time for evasive action by Aircraft X or control instructions from Approach in-between the report of Aircraft Y and the two aircraft passing. HLN is entirely non-radar. Approach cannot and does not see any VFR aircraft, and can only pass traffic if VFR pilots identify themselves. In this case, Aircraft Y did not check on with approach so no traffic was given. Both pieces of traffic were at 120, so they would have been on ZLC's radar and both had ADS-B. HLN does not have access to either of these. If HLN did have access to either one, approach could have called traffic in a timely manner and could have climbed or descended Aircraft X accordingly. HLN needs some form of surveillance, whether it is an ADS-B feed, or a display of already existing radar coverage.

Synopsis

HLN Tower Controller reported a NMAC between two opposite direction aircraft.

ACN: 1823704 *(49 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 8000

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use : Vectors
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Make Model Name : Cessna Stationair/Turbo Stationair 7/8
Crew Size.Number Of Crew : 1
Flight Plan : IFR
Flight Phase : Climb
Route In Use : None
Airspace.Class E : ZZZ

Person

Reporter Organization : Government
Function.Air Traffic Control : Approach
Function.Air Traffic Control : Instructor
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4
ASRS Report Number.Accession Number : 1823704

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I was watching a trainee in Sector X. He was having issues giving a pop up IFR clearance to an aircraft. As he was trying to figure it out I saw Aircraft Y to the south west of the airport at 075 and Aircraft X was headed south bound climbing to 080. I initially thought it would not have been a factor; however, I then heard the trainee give the IFR clearance the wrong altitude and issued a climb into another sectors airspace, IFR. I went and corrected it to avoid a potential airspace violation or worse. As soon as I fixed that situation I saw that Aircraft Y had climbed to 080 and was headed right at Aircraft X. The trainee issued traffic to Aircraft Y and Aircraft Y said he the airbus (Aircraft X) in sight. Aircraft X then said that he was responding to an RA. The trainee then told Aircraft Y to descend for traffic. I keyed up and told Aircraft X to report complete with RA and that the traffic had Aircraft X in sight. Aircraft X said he was going to file a near midair. Aircraft Y should have been capped at a VFR altitude and coordination should have been made to keep Aircraft X climbing. Trainees should be competent at issuing an IFR clearance prior to a control position.

Synopsis

TRACON Controller reported an IFR pop up aircraft was given an IFR altitude resulting in an airborne conflict with an IFR departure.

ACN: 1823435 *(50 of 50)*

Time / Day

Date : 202107
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 12500

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Bombardier/Canadair Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Bombardier/Canadair Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Aircraft : 3

Reference : Z
ATC / Advisory.Center : ZZZ
Aircraft Operator : FBO
Make Model Name : Cessna Stationair/Turbo Stationair 7/8
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Skydiving
Flight Phase : Cruise
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 1823435
Human Factors : Workload
Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Inflight Event / Encounter : Bird / Animal
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Radar controller, no D-side (Radar Assist), significant weather and deviations south of ZZZ. Skydiving aircraft off of ZZZ1 with VFR advisories from Center. Aircraft was performing operations most of the day, multiple jumps, in and out of radar. The location that the operations were occurring were approximately the ZZZZZ intersection on the ZZZ RNAV XX arrival and the ZZZZZ1 fix on the ZZZ [RNAV] Departure. During the incident, Runway XX was active with the Departure in use and aircraft were departing to the north and making a left turn to the southwest, which put them in the approximate location of the skydive operations. The skydiving aircraft [Aircraft Z] was told numerous times that their location was directly in the way of IFR departures and arrivals into ZZZ. ZZZ is and was very busy with IFR traffic at this time. Tower called for two releases on IFR air carrier Aircraft. The first air carrier departed, and ended up being in the same location as the skydiving aircraft. I issued a traffic alert to both aircraft. That was Aircraft X. The second air carrier, Aircraft Y then departed and if memory recalls, I had stopped that aircraft at 9,000 feet on departure anticipating the same scenario as Aircraft X. I again issued traffic, with the skydiving aircraft being at approximately 12,500 feet at this time. The skydiving aircraft then reported that jumpers were away, with the air carrier aircraft directly below. The air carrier pilot reported seeing jumpers in the air and turning to avoid at approximately 6,000 feet below terrain, to which I replied roger. I have brought this up to

managements attention, the day of by notifying the FLM (Front Line Manager) who in turn notified the OMIC (Operations Manager in Charge). We have also forwarded the info to the LSC (Local Safety Commitee). Local airspace has gotten involved and we have opened up the Skydiving LOA (Letter of Agreement) to rewrite the LOA and hopefully make some changes. In my opinion, the jump zone needs to be relocated to a safer spot away from ZZZ IFR traffic.

Synopsis

A Center Controller reported a skydiving operation aircraft was operating along the departure path of two air carrier departures. The first air carrier was issued a traffic alert and the second departure turned off course below the Minimum IFR Altitude to avoid jumpers.