

DISCLAIMER

- This presentation is based on planning for Kirtland AFB Airshow, based on past practice, requirements, and lessons learned on past airshows conducted at our past airshows and other airports.
- This presentation is based on the presenters experiences for planning and executing an airshow.
- Please do not ask the presenter on past accidents at other locations.
 Those locations may still be under litigation, and the presenter has nor information and was not present during the incident.



HISTORY of AIRSHOW ACCIDENTS

- 1988 Ramstein Airshow accident when 3 aircraft collided mid-air and crashing killing 3 pilots and 67 spectators, and injuring 346
- 2002 Sknyliv Airshow accident when Su-27 left wing struck the ground killing 77 spectators, and injuring 543
- 2011 Reno Airshow accident killing 1 pilot and 10 spectators, and injuring 69
- 2015 Shoreham Airshow accident when a T7 crashed onto the A27 arterial road killing 11 people on the ground and injuring several others, including the pilot



HISTORY of AIRSHOW ACCIDENTS

- Statistics from 2010 until now
 - 59 reported incidents, some incidents had multiple aircraft
 - 33 pilots killed and 13 injured
 - 5 passengers killed in one incident
 - 12 spectators killed and 48 injured
 - 45 crashes on airport property
 - 40 on or near runway
 - 5 into spectators viewing area
 - 18 crashes off airport property

ALBUQUERQUE INTERNATIONAL SUNPORT

- Index C airport
- Largest airport in New Mexico and used as a divert airport between Denver, Phoenix, and DFW
- Commercial, cargo, general aviation, and manufactured aircraft
- 3 runways
- 2015 aircraft operations was 124,174
- 2015 total passengers 4,745,256
- Joint use airport with Kirtland AFB

AIRSHOW PLANNING

- Notified in Nov. 2015 that Kirtland AFB will be hosting an airshow for October 2016
- Notified in Jan. 2016 that date has changed to 4 June 2016
 - Also were told it will be a two day airshow with one practice day
- 2011 airshow, had 8 months to prepare
- Only 4 months for this show

AIRSHOW PLANNING

- 2 of fire personnel assigned to committee, same 2 from 2011 show
 - One for operations, and other for fire prevention
 - Kept each other informed a must
- Review the following
 - Open House Plan
 - FAA Certificate of Wavier or Authorization
 - AF requirements
 - Contractor/airboss requirements
- Contacted other bases and airports, how they conducted business

AIRSHOW PLANNING

- Open House Plan
 - Each agencies responsibilities during the airshow from Airboss responsibilities and requirements, vendors, emergency response and more
 - Does not tell us how to do a job, but what is expected
 - Changes include:
 - Working directly with a contractor/airboss
 - Emergency response input were improved all hazards approach
 - Direct communication with other agencies involved with the airshow
 - Outside response agencies were involved with planning
 - Different standby positions
 - First time having civilian acrobatic show aircraft



- All responding agencies had representatives present
 - Meeting held every two weeks if feasible
 - TTX were conducted as needed
 - Required MCI response exercise conducted in April
- Airport Emergency Plans
 - For the airport Kirtland FES has priority over aircraft and rescue. ABQ FD has responsibility for triage and medical care, and AAS has transport
 - All off-base responders, and Kirtland FES know Girard Gate
 - Spectator viewing area was on flightline, easy access
 - Girard Gate secured by Aviation Police
 - Exercised and exercised constantly for emergencies and MCIs

- All Hazards approach
 - Aircraft incident
 - Medical
 - Fire
 - Bombing/Active Shooter/CBRN
 - Others
- Reviewed past incidents at other airports and bases
 - We took a very hard look
 - Lessons learned
- Emergency response routes



- Aircraft incidents was our main concern
 - On airport
 - Off airport
 - Spectator viewing area worst case scenario
 - Took up most of our time, TTX every scenario with the different aircraft
 - Exercised an MCI with aircraft crashing into spectators
 - All response agencies participated to include Physician Consortium
 - UNMH and 3 other hospitals participated

Medical

- Types of trauma and medical emergencies
- Medical patrols in golf carts with med bags
- Fire was not responsible because of manning issues

• Fire

- Still have to take care of the base
- Not all Kirtland units were engaged in the airshow
 - Will respond depending on type of emergency
- Aircraft fires on ground from participating aircraft
- Fires in the vendor area because of propane
- Vehicle fires in parking areas

- Bombing/Active Shooter/CBRN
 - Because of what is going on in the world today
 - All visitors were required to go through metal detector prior to boarding busses.
 - All bags were searched coming through entry points at the airshow, not at the busses
 - Active Shooter with fire arm not likely, other weapons of opportunity possible
 - Bomb threat was likely at the entry point
 - Members from NM CSPT roaming around with monitoring devices
 - EOD on standby

EXERCISE MCI

- The "Good" of the exercise
 - Counted as the Tri-annual
 - Command and General Staff of ICS was outstanding
 - First time that a representative from each responding agency assigned to ICS were prestaged.
 - Team work between Kirtland FES and ABQ Fire conducting rescue
 - Team work between ABQ Fire, AAS, and medical during triage
 - First time MCI setting for Physician Consortium

EXERCISE MCI

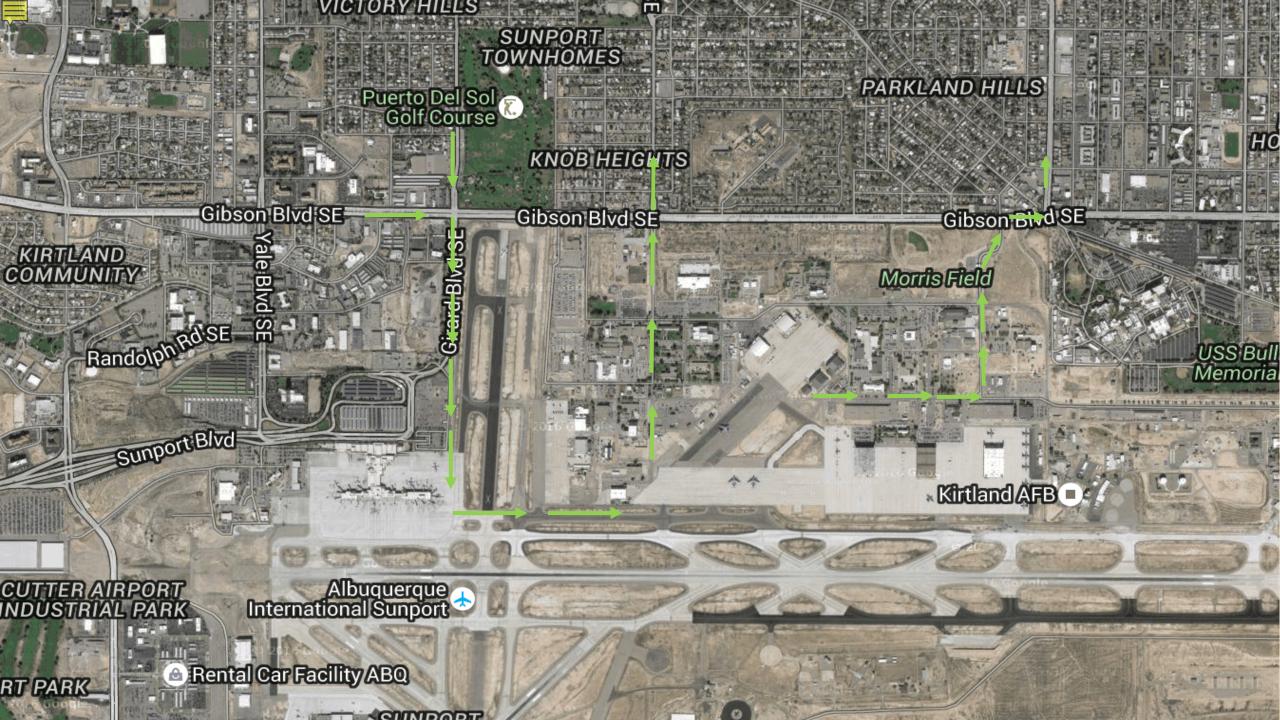
- ICS Command and General Staff
 - Representatives from AFD (2), Kirtland FES (3), Medical (1), AAS (1), and LE (1) that would serve on the staff.
 - Included one engine from AFD for triage (4), one AAS unit for transport leader (2), and two units from Kirtland Med Group (12) and Physician Consortium (2) to assist in triage and treatment
- Pre-staged at Station 2
 - All agencies were briefed on responsibilities by the IC
 - Ensured ICS staff was in tact instead coming in and getting assigned later
- This concept was used for all three days of the airshow

EXERCISE MCI

- Lessons learned during exercise
 - Communication capability was reduced between ABQ and Kirtland because of radios
 - ABQ issued Kirtland extra radios
 - Some "victims" were allowed to be barefoot
 - Personnel viewing exercise concerned about response route
 - Be ready to explain procedures
 - Ensure all personnel are authorized
 - Will need to paint a picture

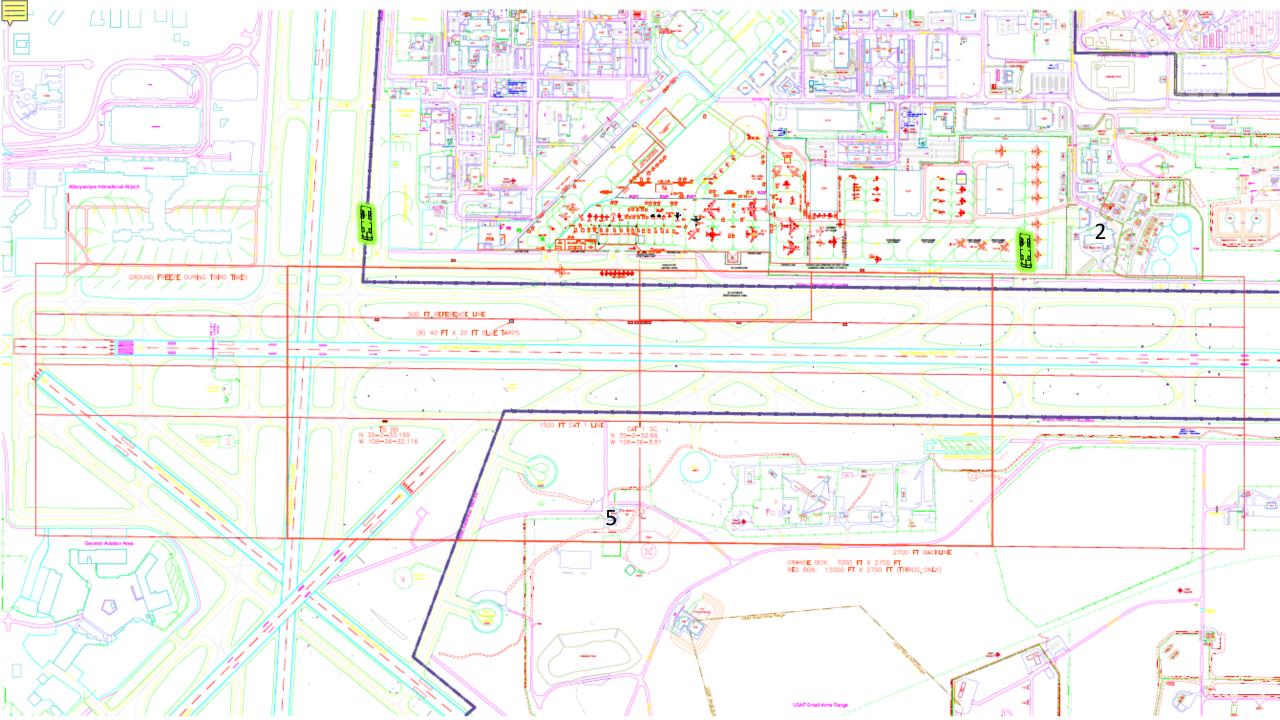
EMERGENCY RESPONSE ROUTES

- Entry and exit was our biggest issue regarding emergency routes
- Security insisted on using one gate and street to enter/exit
- Finally decided to use two different gates, one for entry and other for exit
- Still wanted to use base gates not all responders knew the gates or layout
- Concerns for security



EMERGENCY RESPONSE ROUTES

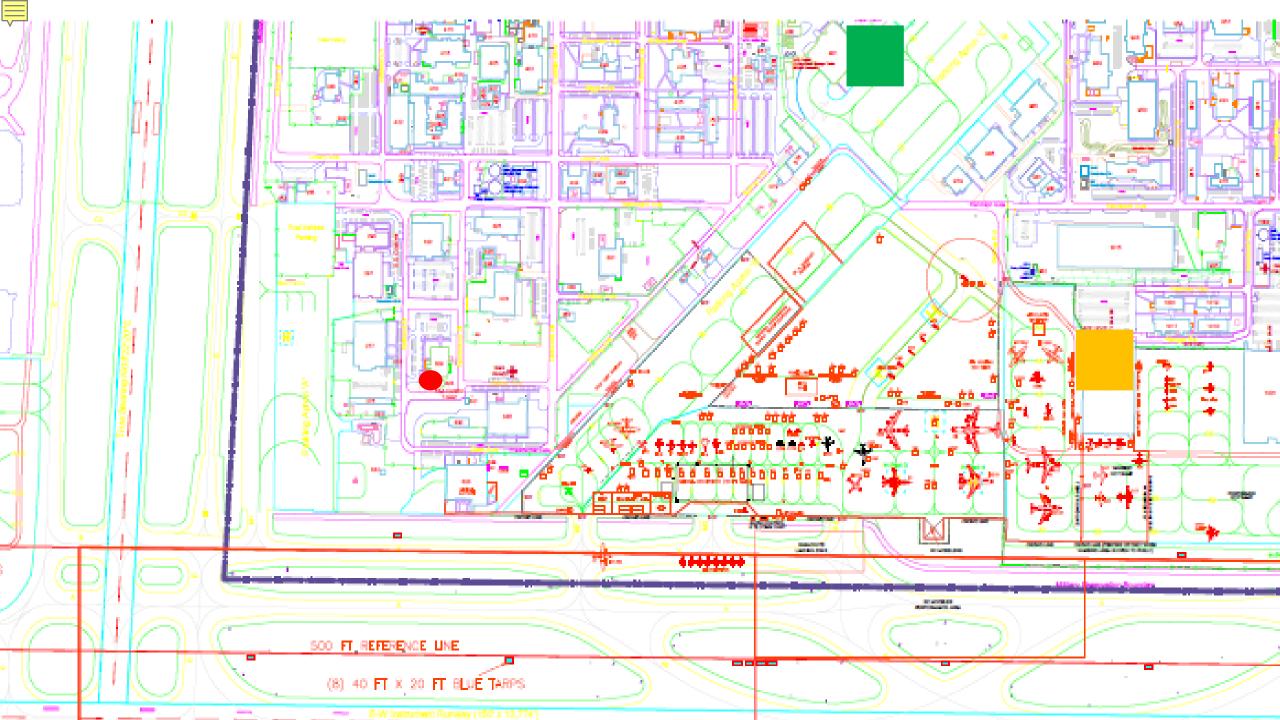
- Second issue regarding ARFF Standby
- Airboss insisted on three positions, middle consisting of a RIV or quick response i.e. wildland truck or golf cart with fire extinguisher
- Two positions, Taxiway A-9 and M-1
- We practiced responding to anywhere on 08/26 from two positions
 - Several times, able to make respond except far ends of runway
 - Would have put additional vehicle towards the ends if need be

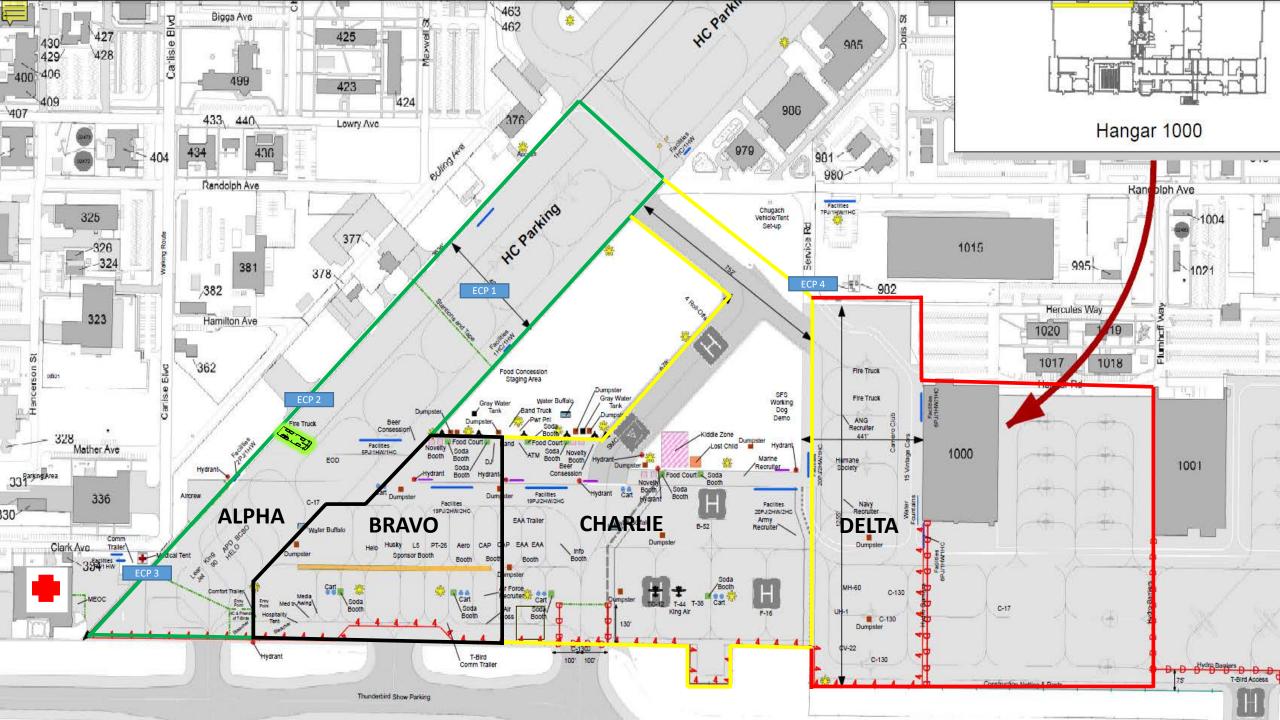




EMERGENCY PROCEDURES

- Evacuation points
 - Used in case of incidents requiring spectators to evacuate
 - Major fire, crash, bombing, etc.
 - Also used to take interviews and ask questions
 - Volunteers assigned wore yellow shirts were trained to assist
 - Form a cordon and start moving spectators to pre-determined evac points
 - Busses would go to evac points to take spectators to parking lots
- Response Sectors
 - For quick response for minor incidents







HOW WE DID BUSINESS

- All personnel were briefed
- Additional manning
 - Additional Chief officers to fill ICS positions
 - Overtime authorized to operate at OLS
 - Man every seat in all ARFF vehicles and rescue
 - Additional manpower for fire prevention
- Off base agencies
 - Just like the exercise:
 - Representatives from AFD (2), Kirtland FES (3), Medical (1), AAS (1), and LE (1) that would serve on the staff.
 - Included one engine from AFD for triage (4), one AAS unit for transport leader (2), and two units from Kirtland Med Group (12) and Physician Consortium (2) to assist in triage and treatment



HOW WE DID BUSINESS

- Standby positions
 - Crews swapped out every 2 hours, not during acrobatics
 - Treat like an emergency, gear on and at the ready position
- Aircraft familiarization on all aircraft participating
- HazMat/IC vehicle and Polaris located near ECP 2
 - Ready to respond if a major incident happened in viewing area
 - Turned into a rehab for LE and us
- Roving patrol in golf carts
 - Checking for fire hazards and violations
 - Ready to respond



AIRBOSS PROCEDURES

- Attend mandatory briefings
 - Review set procedures
 - Discuss emergency actions
- ARFF representative with Airboss at all times
 - Communication in case aircraft incident
 - Because the airport remained open, communication between tower and airboss was crucial
 - Airboss must let ARFF rep know when airfield was turned over to tower
 - This allowed standby crews to switch out
 - Terminology was developed to help keep radio clear
 - "Box was HOT" or "Box was COLD"



LESSONS LEARNED

- Must be with the planning process at the start
- Medical personnel transporting patients in a 2 seat golf cart
- Must have two ambulances available
- Be ready for all types of weather
- Not all responders knew of sector map
- Communication between Airboss
- Airshow pilots children wanting a tour of the truck
- Aircraft familiarization
- Hold your ground

QUESTIONS **THANK YOU**