



Lake Elmo Airport
ADVISORY COMMISSION
LEAAC

Educational Session #3
Stakeholders and
Common Issues and Solutions



Education Session Objectives

Educate the Commission on who has a stake in the airport and typical concerns and solutions at general aviation airports like 21D



LEAAC Education Session Series

Meeting 1: Airports and Regulatory Structure

Purpose: Educate the Commission on how airports are regulated and how 21D fits into that regulatory system

Topics:

1. Overview of Aviation
2. Overview of Local Aviation
3. Overview of 21D
4. Airport Regulators
5. Airport Funding & Economic Output

Meeting 2: Aircraft and Flight Operations

Purpose: Educate the Commission on the basic principles of how aircraft work and standard flight operations at general aviation airports like 21D

Topics:

1. Fundamentals of Flight
2. Pilot certificates
3. Typical Aircraft
4. Towered and Non-Towered Airport Traffic
5. 21D Specific Operations

Meeting 3: Stakeholders and Common Issues and Solutions

Purpose: Educate the Commission on who has a stake in the airport and typical concerns and solutions at general aviation airports like 21D

Topics:

1. Stakeholders
2. Concerns: Noise, Environmental and Safety
3. Solutions: NAP, Engagement, Regulations, Pilot in Command
4. 21D Specific Stakeholders Issues and Solutions

Session 3: Outline

Topics:

- Stakeholders
- Concerns: Noise, Environmental and Safety
- Solutions: NAP, Engagement, Regulations, Pilot in Command
- 21D Specific Stakeholders Issues and Solutions



1. Airport Stakeholders



Who are the 21D Stakeholders?

Airport stakeholders are public and private entities and people who have direct and indirect interests in the airport as a transportation utility, aviation resource, economic generator, and education center.



2. Airport-Related Concerns



What are the Concerns at 21D?

Concerns related to Lake Elmo Airport generally fall under these three categories.

Federal regulations apply to each of these categories; however, local laws and MAC ordinances are applicable in addition to federal regulations.

Voluntary measures enhance safety when mandatory measures conflict with regulations.

Aircraft
Activity/Noise:
Noise Abatement
Recommended Practices

Environmental:
Fuel, Emissions, Water

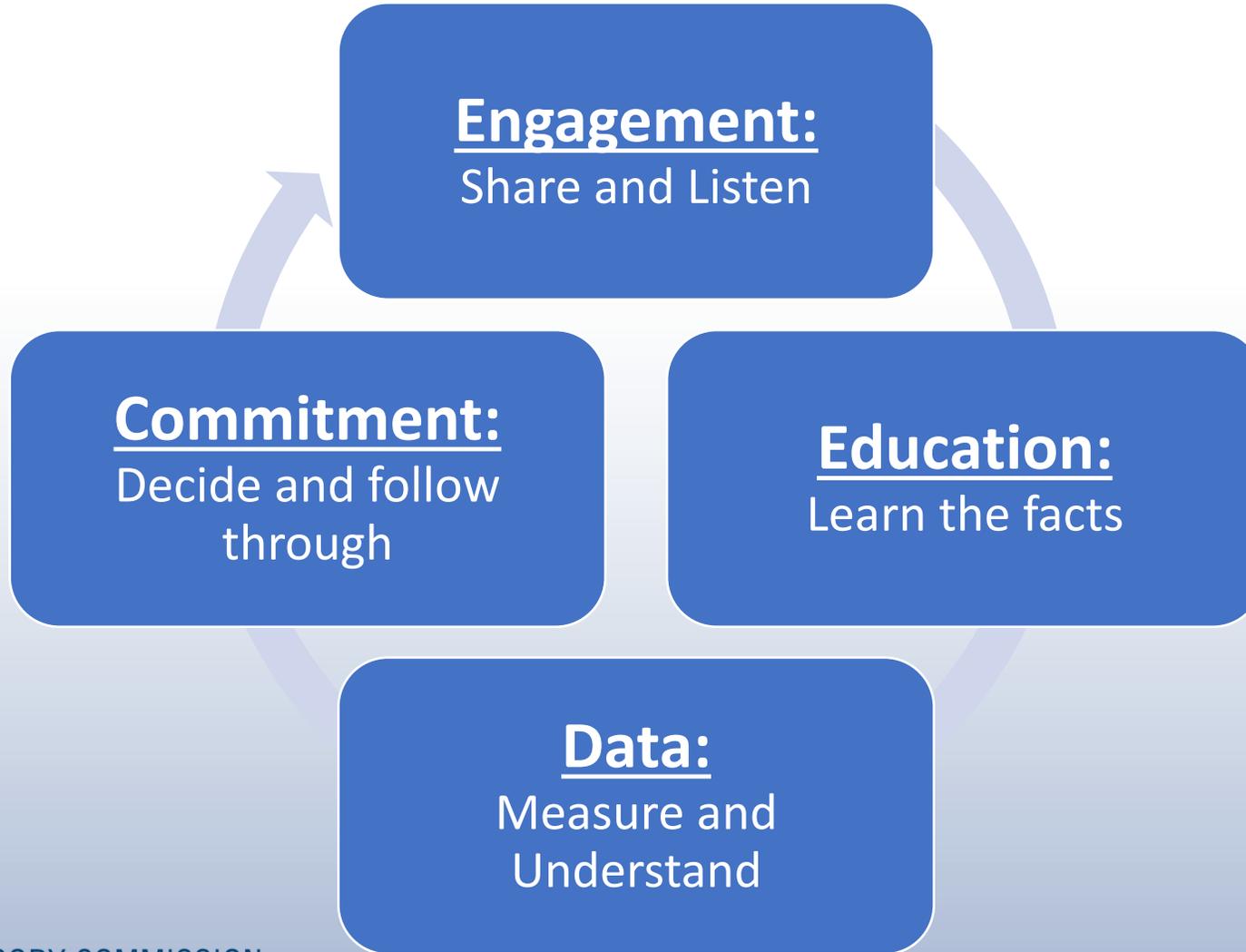
Safety:
Aircraft Operations,
Surfaces, Airfield
Surfaces & Lighting,
Access Management



3. Solutions



What are the Solutions at 21D?



What are the Solutions at 21D?

- **Relationships** Build strong relationships across stakeholder groups to foster trust, communication, and shared understanding.
- **Data** Use data to inform decisions — monitoring helps identify trends, and when activity falls outside the norm, LEAAC, the MAC, and regulators can engage appropriately.
- **Noise** Regulations, along with collaborative and voluntary noise-abatement practices, help reduce impacts on surrounding communities.
- **Environmental** Regulations, monitoring, and enforcement protect environmental resources, airport users, and nearby communities.
- **Safety** Regulations, training, monitoring, and enforcement ensure safe operations for pilots, airport users, and the public.



4. Stakeholder Role in Solutions at 21D

How do 21D Stakeholders Participate?

• Informal



- Community events create opportunities for relationship-building, discussion, and shared understanding (e.g., *EAA Pancake Breakfast, Lake Elmo Aero Open House*)
- Airport user clubs and on-airport businesses foster participation, collaboration, and a sense of shared ownership

• Formal



- **LEAAC** provides a structured forum for collaboration and problem-solving
- **Laws and regulations** establish clear expectations and boundaries for airport operations
- **Local land use planning and zoning** play a critical role in managing compatibility between the airport and surrounding development
- **Education sessions** support informed participation and dialogue
- **MAC tools, data, and reports** provide transparency and fact-based decision-making



Examples of Achievements at 21D



Engaging the community with a viewing area for gathering; information about aviation to build understanding; and sharing messages to encourage positive actions.



Lake Elmo Airport (21D) Fly Neighborly Guide

1. TAKEOFF AND APPROACH

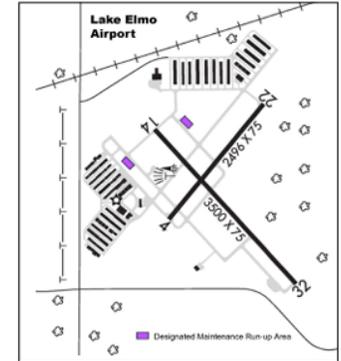
- A. Runway 32 is the preferred runway.
- B. Runway Prioritization (particularly during nighttime hours): 32, 14, 22, 4
- C. Arrivals: follow Precision Approach Path Indicator (PAPI) glide slope until a lower altitude is necessary for a safe landing.
- D. Use guidance published by FAA, NBAA, AOPA when arriving to or departing from the airport.
 - [FAA AC 90-66C Non-Towered Airport Flight Operations](#)
 - [FAA AC 91-36D - Visual Flight Rules \(VFR\) Flight Near Noise-Sensitive Areas](#)
 - [NBAA Noise Abatement Program](#)
 - [AOPA Noise Awareness Steps](#)
- E. Turbine-powered aircraft and itinerant aircraft, depart Runways 32 or 14, fly runway heading and turn to a northerly heading after attaining an altitude within 300 feet of traffic pattern altitude.

2. TRAFFIC PATTERN (Left Turns)

- A. Fly aircraft at the airport traffic pattern altitude:
 - Turbine-powered aircraft: 1,500 feet agl (2433 msl)
 - Propeller-driven aircraft: 1,000 feet agl (1933 msl)
- B. Avoid multiple training events by turbine-powered aircraft in the airport traffic pattern.
- C. Keep traffic pattern legs as short as possible and close to the airport without risking safety.
- D. Use the full length of runway for arrivals and departures: avoid stop and go operations and avoid intersection takeoffs.
- E. Avoid repetitive activity over residences, including flight training activities.
- F. When departing the traffic pattern, choose a path that avoids overflying residential areas if practical.

3. MAINTENANCE RUN-UPS

- A. Use designated areas (see map) to conduct all engine tests and maintenance run-ups in excess of 5-minutes. Pre-departure Run-ups may be conducted in other areas.
- B. Avoid engine tests and maintenance run-ups during nighttime hours.



4. HELICOPTER TRAINING

- A. Avoid helicopter training in the traffic pattern during nighttime hours.
- B. Avoid hovering for extended durations in the vicinity of residential areas.
- C. Avoid repetitive activity over the same neighborhoods.

5. NIGHTTIME OPERATIONS (2200-0700)

- A. Avoid operating aircraft during nighttime hours.
- B. Avoid nighttime currency operations and flight training in the traffic pattern after 2400 local time.
- C. Avoid intersection takeoffs and stop and go operations.
- D. Avoid low-level flyovers at the airport.

If you have questions, please contact the airport manager at
763-717-0001

ATTENTION PILOTS

**PLEASE FLY NEIGHBORLY
HELP REDUCE AIRCRAFT NOISE**



More Achievements at 21D

Active Experimental Aircraft Association

- Active and well-run volunteer-based local chapter that promotes aviation safety.
- Hosts monthly meetings, education sessions, discovery flights, and pilot mentoring.
- Sponsors a large pancake breakfast.

Well-Functioning LEAAC

- Active participation in quarterly meetings.
- Well-attended, public discussions to discuss topics concerning 21D.
- Collaborative work plans, including noise abatement.

Vibrant and Growing Flight School and FBO

- Expanded education and career opportunities for future pilots.
- Job and economic generator with growing maintenance and flight school programs.
- Quality aviation resource for aviators and non-aviators.



Summary and Questions

Today's Education Session: **Stakeholders and Common Issues and Solutions**

“Educate the Commission on who has a stake in the airport and typical concerns and solutions at general aviation airports like 21D ”

Topics for Future Education Sessions?



**Thank
you!**

