STATEMENT OF QUALIFICATIONS FOR FIVE YEAR ON-CALL AVIATION ENGINEERING SERVICES FOR

OELWEIN MUNICIPAL AIRPORT (OLZ)

THE KIRKHAM MICHAEL DIFFERENCE:

DEDICATED AVIATION TEAM OF DESIGNERS AND PLANNERS WHO ARE ALSO PILOTS, AIRCRAFT OWNERS, AND AVIATION ENTHUSIASTS.

KIRKHAM MICHAEL 1946 75 2021

Contact:
Eric Johnson
ejohnson@kirkham.com
515.270.0848

Date:

October 28, 2021

October 28, 2021

Dylan Mulfinger, City Administrator
City of Oelwein
20 2nd Avenue SW
Oelwein, Iowa 50662

RE: Statement of Qualifications for 5 Year On-Call Aviation Engineering Services for Oelwein Municipal Airport

Dear Mr. Mulfinger:

We are excited to partner with the City of Oelwein as your airport continues to develop and deliver value to the community, local economy, and the State and Federal System of Airports. It is evident you take pride in your airport and see the potential it has. With 125 years of combined airport experience, the Kirkham Michael - CGA team will continue to help you maintain and build upon your investment.

We are confident our team can meet and exceed your goals, budgets, and expectations as you move forward. In addition, our aviation team provides the following benefits.

UNDERSTANDING OF THE OELWEIN MUNICIPAL AIRPORT: After speaking with you, we understand that the capital outlay for the airport is of particular concern to the city. With this in mind, we can complete a cost-benefit analysis for your projects so you can be sure to get the most value on your investment. Also, CGA's Cedar Falls office will provide field services and other project coordination to decrease travel costs. This, our vast airport experience creating smart Capital Improvement Plans, and our considerable knowledge of FAA and state funding are all part of the package the Kirkham Michael – CGA team will bring to your airport. We have also worked with other city airports to make the most of their funds including Harlan, Osceola, and Manchester.

EXPERIENCED AVIATION TEAM LEADER: Eric Johnson has managed over 450 FAA projects in the last 40 years. This experience includes airport planning and design through construction for projects throughout the State of Iowa and the FAA's Central Region, including:

- runways, taxiways, and aprons
- pavement construction and rehabilitation
- hangar construction and rehabilitation
- airfield lighting, NavAids, electrical vaults
- airport fencing
- Airport Layout Plans /AGIS
- airspace studies
- land acquisition
- fuel systems
- Snow removal equipment (SRE) acquisition
- SRE building

Eric also has extensive experience with aviation funding sources and will assist you with developing a workable Capital Improvement Program for the airport.

THE KIRKHAM MICHAEL - CGA TEAM SIMILAR AIRPORT EXPERIENCE: Our team has over 125 combined years of successfully completed pavement rehabilitation and new construction, snow removal equipment acquisition, and lighting projects. Kirkham Michael will be tasked with project management, design, and bidding, while CGA will complete the survey work and construction observation. Kirkham Michael has recently completed similar projects in Iowa for Harlan,

ERIC JOHNSON
Project Manager

EXPERIENCE
40 years of airport planning & design

35 rehabilitation and 20+ lighting projects over the past 20 years

Licensed pilot

APPROACH
Funding assistance

Maintain budgets

Tailor project to fit local conditions for best quality and longevity

Design, bidding, construction, and closeout services

Manchester, Osceola, Ottumwa, and Pocahontas. CGA has worked with Charles City, Creston, Grinnell, Marshalltown, and Newton. We incorporate local and FAA guidelines to all projects.

SPECIALIZED AIRPORT STAFF: For 75 years, the Kirkham Michael airport team has maintained FAA certifications and works solely on airport projects. This gives us a comprehensive knowledge base that helps to overcome challenges as they arise on airport projects. In addition, the team's experience in all aspects of the FAA airport project process produces a quality product while consistently looking for ways to maintain a tight budget.

ATTENDANCE AT AIRPORT BOARD MEETINGS / ASSISTANCE WITH PLANNING: Our team feels it is critical to regularly attend airport board meetings to understand your needs and how best to address them. We also think it is essential to keep you informed of all FAA and IaDOT funding programs, and we will help you secure funding through these agencies or find alternative sources. These programs require a current and well-thought-out Capital Improvement Plan. We will assist the airport with grant applications, Capital Improvement Plans, and other required FAA documents critical to airport development.

AWARD-WINNING AIRPORT PAVING PROJECTS: Over the past 12 years, Kirkham Michael, under the guidance of Eric Johnson, has earned 12 national and state awards for airport planning and design in airfield pavement preservation, concrete paving, and asphalt/concrete overlay projects.

PILOT'S PERSPECTIVE: Mike Olson (President of Kirkham Michael) and I (Eric Johnson, Aviation Team Leader) are active, licensed pilots. We understand the airport user's experience. We will use our combined 70 years of airport experience to assist our planners and designers in shaping your project, meeting or exceeding FAA requirements, and ultimately the pilots' expectations using your airport.

FINALLY, THANK YOU FOR CONSIDERING THE KIRKHAM MICHAEL - CGA TEAM. We are genuinely excited about this opportunity to continue serving your airport. Please feel free to call your point contact, Eric Johnson, at 515.270.0848 with any questions.

"Kirkham Michael values the strong working relationship we have developed with our airport clients. We believe the key to this partnership's success has been open communication, attention to detail, utilizing existing resources, the foresight of potential challenges, and planning for future development.

We will apply these principles to your projects as well."

Sincerely,

KIRKHAM MICHAEL

Eric W. Johnson
Vice President and Aviation Team Leader

Matt Garber, P.E., P.L.S.
President, CGA

CONTENTS

Cessna 182 RG: Owned by Eric Johnson
Vice President, Kirkham Michael

Piper Arrow: Owned by Mike Olson, P.E.
President, Kirkham Michael

KIRKHAM MICHAEL DIFFERENTIATORS

Knowledge of your airport includes:

- Working on the IaDOT Aviation System Plan and pavement evaluation projects.
- Our recent visit.

Knowledge + Experience = Efficiency

FAMILIARITY OF YOUR AIRPORT

- Kirkham Michael team works solely on airport projects including planning, design, and construction
- Together with our teaming partner, CGA, we have a combined 125 years of airport experience

SPECIALIZED AVIATION TEAM

- Design from a pilot's perspective
- Active board members of state and local aviation associations
- Licensed pilots
- Understand user's concerns

WE ARE PILOTS & USERS OF THE AVIATION SYSTEM

- Aerial mapping and imagery with drones
- 3D modeling and animation software to analyze design concepts
- Aircraft maneuvering software for pavement design and layout

INNOVATION

12 Best Design and Constructibility Awards in the last 12 years, including a National Award, for airport pavement reconstruction

12 AWARD WINNING AIRPORT PROJECTS

We strive to be an integral part of our client's aviation team and cultivate collaborative partnerships that include:

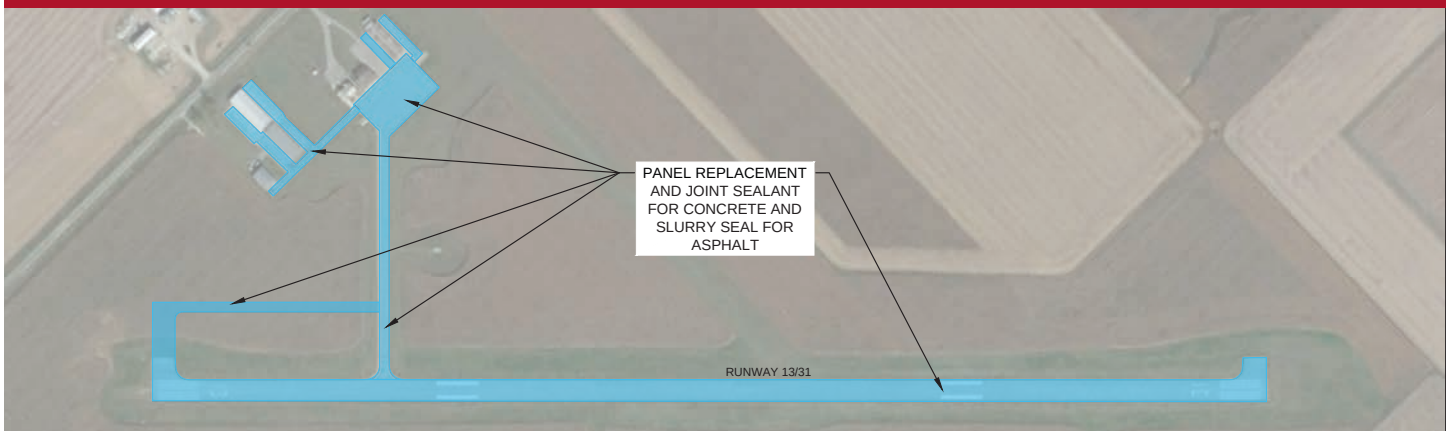
- Regularly attending meetings
- Providing support with FAA processes
- Attending client's functions

We will go the extra mile to help our clients succeed!

GO ABOVE & BEYOND TYPICAL SERVICE

KIRKHAM MICHAEL

FY 2022 RUNWAY, TAXIWAY, APRON REHABILITATION



APPROACH

PAVEMENT EVALUATION

The first critical step is conducting a pavement evaluation. The evaluation will establish a scope of work to best address methods for preservation. Key considerations and approach include:

- Site visit with drone mapping of the pavement.
- Review of the Pavement Condition Index Report.
- Coring to analyze pavement and subsurface conditions.

DESIGN CONSIDERATIONS

This project will consist of:

- Concrete panel replacement.
- Cleaning and repairing cracks.
- Slurry seal for asphalt
- Removing and replacing the existing joint sealant on the runway, apron, and taxiway with new joint sealant.
- Remove the existing pavement markings and place all new pavement markings.

POTENTIAL CONCERNS

ACCESS DURING CONSTRUCTION

- **Our team's solution** is to develop a Construction Safety & Phasing Plan to phase construction to avoid pavement closures as much as possible.

LONG TERM PAVEMENT MAINTENANCE COSTS

- **Our team's solution** is to provide a detailed life-cycle cost analysis, including annual anticipated maintenance costs, for the airport and the city to use as a budgeting tool.

From the latest Airfield Pavement Conditioning Index (PCI), our initial assessment is that the runway and apron appear to be in good condition, and portions of the taxiway may require in-depth rehabilitation.

FY 2023 RECONSTRUCT OR REPLACE AIRPORT LIGHTING VAULT
FY 2025 INSTALL RUNWAY VERTICAL/VISUAL GUIDANCE SYSTEM

VAULT APPROACH

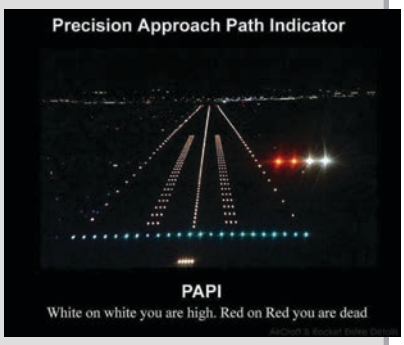
The Kirkham Michael - CGA team has 125 years of non-precision and precision airport lighting, signage, and visual aid experience. Our approach to your lighting improvement project will consist of reconstructing or replacing your lighting vault. Design considerations include:

- **Evaluate options** along with cost benefit analysis for a precast vault building or utilization of space in the existing terminal building.
- **Review of the existing regulator and circuitry.** This includes a review of the regulator load capacity for the future lighting and Runway Vertical/Visual Guidance System. If necessary, new regulators can be included in the project.
- **Include installation of new wiring and conduit.**

GUIDANCE SYSTEM APPROACH

The recommended system for this project would be to install Precision Approach Path Indicators (PAPIs) at the Runway Ends 13 and 31. This system will improve safety by providing visual guidance for pilots on final approach. Our team's extensive experience with these visual navigational aids include:

- PAPI sighting and aiming.
- FAA flight checks.
- Regulator capacity review.
- Options for LED lighted PAPIs.
- Considerations for pilot controlled or photocell operating PAPIs.



POTENTIAL CONCERNS

RUNWAY CLOSURES DURING CONSTRUCTION

- **Our team's solution** is to phase construction to keep runway closures to a minimum.

FY 2023 ACQUIRE SNOW REMOVAL EQUIPMENT ACQUISITION

APPROACH

We have assisted Part 139 and GA airports with acquiring snow removal equipment, including Kearney Regional, Central Nebraska Regional, and Pocahontas Municipal Airports. We understand that you wish to purchase a broom and/or blade attachment for the existing tractor, similar to the photo shown above. For your project we will complete the following per FAA requirements:

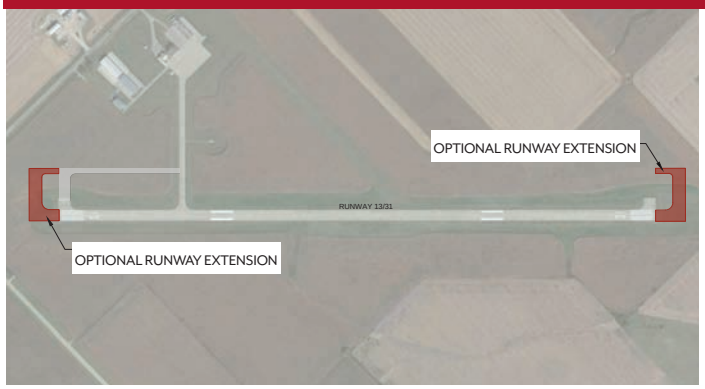
- Review current inventory of the existing equipment.
- We will work closely with you on various options to make sure the appropriate attachments will be specified.
- Review and provide FAA required calculations to determine the size, type, and amount of equipment needed.
- Assist the City in acquiring the attachments under FAA procurement guidelines.

POTENTIAL CONCERNS

FUNDING SOURCES AND EQUIPMENT ELIGIBILITY

- **Our teams' solution** is to work closely with the City and the FAA to determine that all equipment is eligible. We will also assist the City with the funding applications.

FY 2024 EXTEND RUNWAY 13/31
FY 2026 CONSTRUCT PARALLEL TAXIWAY



EXTEND RUNWAY

Our team will provide the FAA required updates to critical aircraft and other applicable operations (take-off and/or landing) including forecasts to confirm ultimate runway lengths. This justification is required for the project to move forward. The goal will be to reach 500 annual operations with the largest most demanding aircraft. This will also be supported by cost benefit analysis.


Lyons-Rice County Municipal Airport Runway 17/35

CONSTRUCT TAXIWAY

Our understanding is that you will complete the full parallel taxiway for Runway 13/31 and make the connection at Runway 31. As the airport develops, a full parallel taxiway will improve safety and allow for increased operations for this runway. Our team's design approach is based upon recent successful airport projects at Harlan, Osceola, and Ottumwa airports.

We recommend a preliminary engineer's report following FAA requirements to assist the airport in providing cost benefit analysis, establishing the budget, and other project details. Considerations are:

- **Sizing of the turnarounds** at the approach end of 31 per critical aircraft requirements.
- **Pavement design considerations** are to match the existing pavement thickness and provide smooth transitions at proposed taxiway and crosswind runway intersections
- **Consideration for subbase** to improve subsurface drainage which includes soil modification, if required.
- **New markings and signage.**

POTENTIAL CONCERNS

BALANCING THE EXTENSION BETWEEN RUNWAY 13 AND 31 ENDS TO MINIMIZE LAND ACQUISITION.

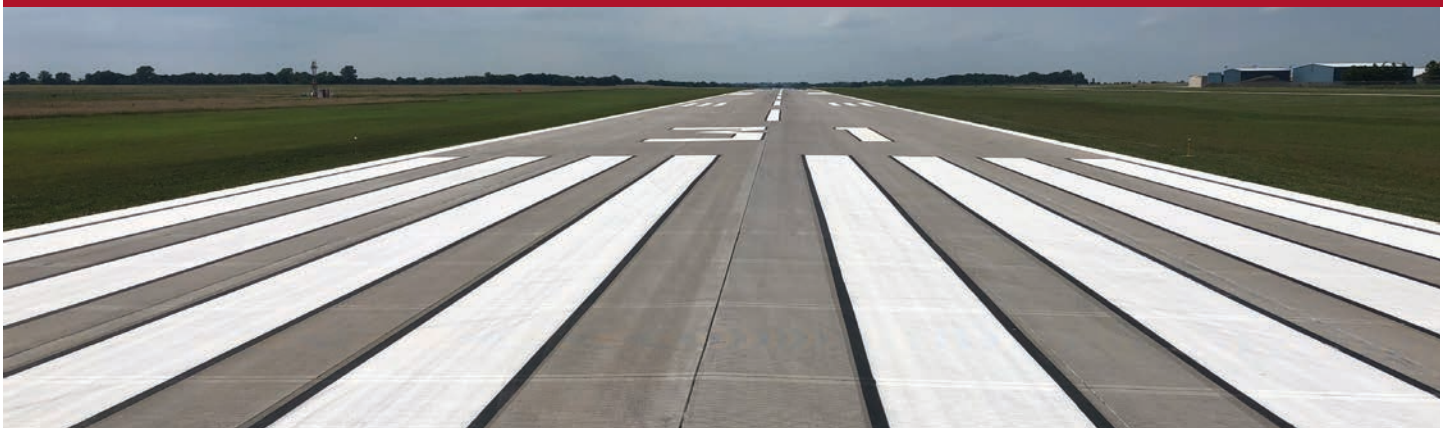
We would anticipate an ultimate extension between 200' and 400'.

- **Our team's solution** is to provide an accurate forecast to include actual commitment letters of potential corporate small and mid-size business jets that may require the additional length.

RUNWAY CLOSURES DURING CONSTRUCTION

- **Our team's solution** is to phase construction to keep runway closures to a minimum. We would also consider temporary displaced thresholds.

MULTIPLE AIRPORT PROJECTS | OTTUMWA REGIONAL AIRPORT



PROJECT CONSIDERATIONS

Runway 13/31 Reconstruction

- Milled the existing asphalt runway and reused the millings as a subbase material below the new concrete runway.
- New precision and non-precision runway markings.
- Runway and taxiway edge lights, REILs, PAPIs, and threshold lights for the approach lighting system.
- Pavement evaluation with life-cost cycle analysis to determine the type of pavement to use.
- Extended Runway End 13.

The Runway 13/31 reconstruction project was the largest general aviation airport improvement project in FY 2019 within the State of Iowa. Kirkham Michael assisted the airport in acquiring funding for the project.

PROJECT CONSIDERATIONS

Additional Projects (Partial Summary)

- Runway 4/22 asphalt rehabilitation will begin Spring 2022.
- AGIS for the FAA to develop and publish new approaches.
- Apron rehabilitation.
- Corporate hangar.
- Fuel system upgrades.

Corporate Hangar and Apron

BENEFIT

The benefits Ottumwa Regional Airport received from these projects include extended pavement life, accommodation for larger aircraft and increased usage of the airport, boost for the local economy, improved fueling operations, and increased revenue from higher fuel sales and additional hangar rent.

RUNWAY 17/35 PROJECTS | LYONS-RICE COUNTY MUNICIPAL AIRPORT

PROJECT CONSIDERATIONS

Kirkham Michael has worked closely with the Airport for over 15 years on their improvement projects. The most notable projects were improvements to Runway 17/35. Planning was critical to get the runway to where it is today.

ASPHALT REHABILITATION: We helped the airport with their last asphalt rehabilitation (slurry) of the runway in 2004.

PLANNING: After the slurry seal, Kirkham Michael and the Airport carefully planned out the steps necessary to ultimately lengthen and widen the runway. Several steps needed to be accomplished for FAA eligibility of the ultimate runway that included:

1. Updated the ALP to show the new runway dimensions and updated the Exhibit 'A' Property Map to show the land acquisitions necessary for the ultimate runway.
2. Completed an Environmental Assessment for the runway improvements.
3. Acquired the land for the runway improvements.
4. Preliminary runway design included an Aeronautical Survey for the FAA to airspace the ultimate approaches.

RUNWAY DESIGN AND CONSTRUCTION: To reach the ultimate length and width, construction consisted of two phases.

PROJECT CONSIDERATIONS

1. *Phase 1:* Reconstruction and widening of Runway 17/35. The old asphalt runway was removed and the asphalt millings reworked into the subbase of the new runway. The new runway was widened and constructed in concrete with edge drains. In anticipation of the extension project, the runway centerline markings and edge lights were laid out to accommodate the extension.
2. *Phase 2:* Extension of Runway Ends 17 and 35. Each end was extended to the ultimate length with additional edge lights and new runway markings in the extensions. PAPIs and REILs were also installed during the project. A new connector taxiway was constructed to Runway End 17.

FINAL IMPROVEMENTS: The last action items for Runway 17/35 that also improved the approaches was removal and mitigation of obstructions within the approaches and installation of an AWOS.

BENEFITS

The reconstructed Runway 17/35 now accommodates larger aircraft and new business to the airport and economy. The AWOS provides critical weather information that aids pilots in making informed decisions on flights which improves overall safety.

AIRFIELD PAVEMENT RECONSTRUCTION PROJECTS


Osceola Municipal Airport


Harlan Municipal Airport


Hastings Municipal Airport


Belle Plaine Municipal Airport - CGA

PROJECT CONSIDERATIONS

Preventative maintenance and rehabilitation are necessary to extend the useful life of pavement. The first step is conducting a pavement evaluation that involves site evaluations with the Airport staff. Together we review the site conditions for cracks, joint sealant condition, signs of deterioration or ASR, and discuss the laboratory tests of the underlying subbases and concrete core samples. From there, we work with the airport, IaDOT, and FAA to determine the degree of deterioration and the best solution for maintenance or repair.

Solutions include:

- Crack repair, spall repair, or panel replacement.
- Resealing joints.
- ASR preventative treatments (using a silane solvent or overlay).
- Concrete or asphalt overlay.
- Crack repair and slurry seal.
- New pavement markings.

In conjunction with these projects, we also prepare Pavement Maintenance Programs for our clients that include comprehensive details and procedures such as pavement inventory, inspection schedules, record keeping, and methods for maintenance. This plan assures the proper performance of pavement maintenance, both preventative and future repair.

BENEFITS

By providing good sound pavement analysis and recommendations, our airport clients have saved on annual pavement maintenance costs. Our team has successfully extended the pavement life for many airports, including Osceola, Ottumwa, Falls City, Hastings, and Superior airports, through crack repair, panel replacement, and overlay projects. These cost-effective projects helped preserve the pavement, prevented costly reconstruction, and improved each airport. Not only do the airports and local economy benefit from these projects but so does the State System of Airports.

AIRFIELD LIGHTING PROJECTS

Harlan Municipal Airport


Ottumwa Regional Airport

Seward Municipal Airport


Forest City Municipal Airport - CGA

PROJECT CONSIDERATIONS

Our team has 125 years of airport lighting experience including runway and taxiway lighting, visual navigational aids, beacons, and lighted signage. We are well versed in the FAA criteria for lighting configurations on runways and taxiways.

- Proper siting and aiming of approach lighting systems, PAPIs, and REILs are critical to aircraft safety. We take extra care when aiming visual aids such as PAPIs to ensure correct glide slopes, threshold crossing heights, and that obstacle clearance surfaces are clear.
- With all lighting projects, we review existing circuit and regulator load capacity. These projects have received new wiring, conduit, counterpoise wire, and other necessary equipment. When necessary, new regulators are sized to current and potential future loads. We also explore options for high efficiency such as LED fixtures. Lighting operations are also considered with options for pilot controls or photocells for dusk to dawn operations.

BENEFITS

The new or improved lighting and visual navigational aid systems increased safety at these airports during night and low visibility conditions, while installation of LED fixtures improved efficiency and increased cost savings.


Superior Municipal Airport

SNOW REMOVAL EQUIPMENT ACQUISITION

Kearney Regional Airport | Broom and Carrier Vehicle

PROJECT CONSIDERATIONS

Our team understands that proper equipment is vital for keeping runways open for the general public, airlines, emergency, and medical users during winter. We have assisted our clients with successfully acquiring snow removal equipment through state and federal assistance programs.

BENEFITS

The flying public, including charter and medical flights, will see improved response times for clearing the runways, taxiways, and aprons.

Pocahontas Municipal Airport | Dump Truck

Kearney Regional Airport | Snow Blade

Central Nebraska Regional Airport | Snow Blade

TURNAROUND AND PARALLEL TAXIWAY PROJECTS


Harlan Municipal Airport


Falls City Municipal Airport


Hugoton Municipal Airport

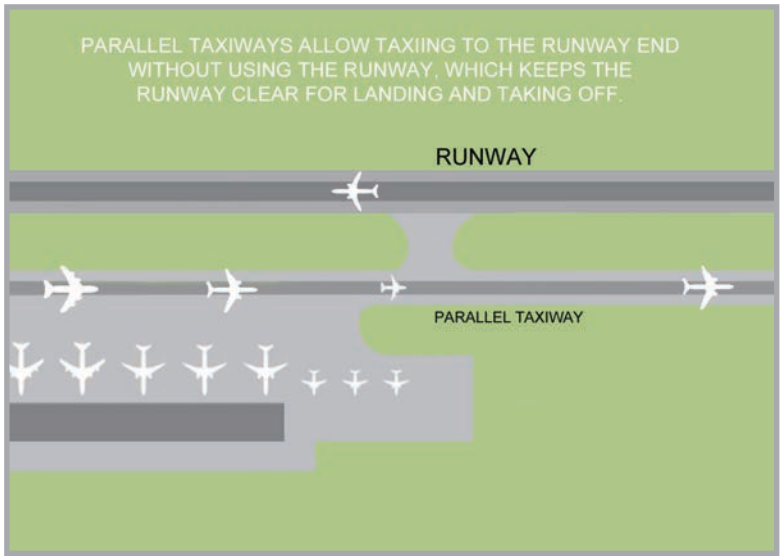

Central City Municipal Airport

PROJECT CONSIDERATIONS

Turnarounds and taxiways are critical components for the airport. When a parallel taxiway is not available, an aircraft must taxi down the runway to reach the take-off end for departure or to reach the apron after landing. Turnarounds provide a space large enough for aircraft to turnaround or hold. Taxiways provide access to and from the runway and apron. Parallel taxiways are constructed in part for safety purposes.

Our team is well versed in pavement construction, ALP planning, and the FAA requirements to properly design turnarounds and parallel taxiways. Design standards include:

- Runway centerline to parallel taxiway centerline separation and parallel taxiway centerline to fixed or moveable object separation.
- Parallel taxiway grading requirements necessary to clear the runway's protective airspace.
- Aircraft maneuvering and turning radius requirements.
- Holding position markings and other taxiway markings and signage.



BENEFITS

Parallel taxiways eliminate the use of runways for taxiing. These allow for increased runway usage, improved instrument approaches, and enhanced safety especially during low visibility conditions.

RELEVANT EXPERIENCE OF KEY PERSONNEL

AS A TEAM, ALL MEMBERS ARE INVOLVED IN EVERY PROJECT. **Below is a partial list of airports and the projects we have completed that are comparable to the projects identified in your request for qualifications.**

- **Iowa Department of Transportation**
  - Aviation System Plan
  - Pavement evaluation
- **Harlan Municipal Airport**
  - Apron concrete rehabilitation
  - Hangar door rehabilitation
  - Runway 15/33 reconstruction
  - Airfield lighting improvements
  - Parallel taxiway
- **Manchester Municipal Airport**
  - Apron expansion
  - Airfield asphalt pavement rehabilitation
- **Osceola Municipal Airport**
  - Airfield concrete pavement rehabilitation
  - Parallel taxiway (preliminary design)
  - Runway end turnarounds (preliminary design)
  - Land acquisitions
- **Ottumwa Regional Airport**
  - Runway 4/22 asphalt rehabilitation
  - Runway 13/31 reconstruction & extension
  - Apron improvements
  - Fuel system improvements
  - Corporate hangar
- **Pocahontas Municipal Airport**
  - Snow Removal Equipment (SRE) acquisition
  - Taxilane reconstruction
  - Runway 12/30 asphalt rehabilitation
  - Airfield lighting improvements
- **Corning Municipal Airport**
  - Fuel system improvements
- **Brenner Field/Falls City Municipal Airport**
  - SRE building
  - Hangar rehabilitation
  - Runway 15/33 concrete rehabilitation widening, lighting, NavAids, & beacon
  - Fuel system improvements
  - Perimeter fencing
  - Apron and taxiway concrete rehabilitation
  - Parallel taxiway
- **Broken Bow Municipal Airport**
  - T-hangar expansion
  - Runway 14/32 concrete overlay & taxiway realignment
  - Runway end turnaround
- **Osage City Municipal Airport**
  - Airfield lighting improvements
  - Runway 17/35 asphalt rehabilitation
  - Concrete airport access road
  - Taxilane reconstruction
  - New Runway 18/36 preliminary design
- **Hastings Municipal Airport**
  - 6-place T-hangar & hangar rehabilitation
  - Runway 14/32 concrete pavement rehabilitation
  - Runway 04/22 concrete pavement rehabilitation and PAPIs
  - Terminal area lighting and new beacon with tip down tower.
- **Additional SRE Acquisition at:** Kearney (EAR), Grand Island (GRI)
- **Additional airfield lighting projects at:** Kearney (EAR), Lyons (LYO), Ness City (48K)

The past success on our projects is primarily due to the qualifications and expertise of the people on our team. Kirkham Michael's investment and commitment to providing services to municipal airports is evident through our dedication to employ a specialized aviation team. Our aviation team has solid working relationships within these organizations and continuously works at staying abreast of the current changes in the state and federal regulations. Following is a brief synopsis of our key team members, the role they will have working on your projects, and their qualifications.

KEY PERSONNEL

ERIC JOHNSON, V.P.
AVIATION TEAM LEADER

As Kirkham Michael's company-wide Aviation Team Leader, Eric is an aviation expert with nearly 40 years of experience in the planning, design, and construction of primary and general aviation airports in accordance with the FAA requirements. His role as a leader includes business development, agency coordination, and public outreach.

He has worked with numerous airport clients to help achieve their airport's goals in a cost-effective manner. Eric also consults with airport clients to determine funding eligibility and justification for airport development items for federal and state grants.

EDUCATION:

FAA Airport Planning, FAA Academy, 1999

B.S., Business Administration (minor in Engineering Technology) - Bellevue University, 1992

A.A.S., Civil Engineering Technology - Southeast Community College, 1980

PROFESSIONAL EXPERIENCE:

Kirkham Michael, 2000
Other Firms, 19 Years

LICENSED PILOT

ROB GARBER, P.E.
SR. AVIATION ENGINEER

Rob has 30 years of aviation engineering experience. He is a dedicated project manager who has developed strong relationships with the FAA, state and federal agencies, contractors, and numerous clients.

He provides leadership for the aviation team in airport design and construction, development of criteria for airport expansion and adjacent land use, forecasting, and improving operational safety.

He proudly served in the U.S. Coast Guard as an electronics technician and received several awards that include the NASA Letter of Appreciation, Meritorious Unit Commendation, and the Coast Guard Sea Service Ribbon.

EDUCATION:

FAA Airport Planning, FAA Academy, 2001

B.S., Civil Engineering - Iowa State University, 1992

REGISTRATIONS:

Professional Engineer - IA; NE; KS

PROFESSIONAL EXPERIENCE:

Kirkham Michael, 2015
Other Firms, 23 Years

CORY GASTON
AVIATION ENGINEER

Cory has over seven years of engineering experience, most recently as the county engineer for Mills County, Iowa. While there, he produced the first in-house design project for the county in 12 years. He is familiar with funding acquisition, grant writing, planning, design through construction observation/administration, and project closeout. Cory is detailed-oriented and possesses strong analytical and problem-solving skills. He also has effective public relation skills and performs under pressure while meeting critical deadlines.

EDUCATION:

B.S., Civil Engineering - University of Nebraska, Lincoln, 2013

REGISTRATIONS:

Professional Engineer - IA

PROFESSIONAL EXPERIENCE:

Kirkham Michael, 2021
Other Firms, 7 Years

KEY PERSONNEL

MIKE OLSON, P.E.
SR. AVIATION ENGINEER - QA/QC

Mike has 34 years of experience and is currently President of Kirkham Michael. Mike ensures company resources are made available so that projects are completed on time, within budget, and with technical precision and quality. He also makes certain that our clients' needs are understood and that requests are responded to in a timely manner. Mike utilizes the resources and experience company-wide to make certain our clients' projects are a success.

EDUCATION:
B.S., Civil Engineering – Iowa State University, 1991

REGISTRATIONS:
Professional Engineer – NE; IA; KS

PROFESSIONAL EXPERIENCE:
Kirkham Michael, since 1991
Other firms, 8 years

LICENSED PILOT

JENNIFER OLSON
AIRSPACE SPECIALIST

Jennifer recently joined the Aviation Team as our airspace specialist. She has extensive experience working with the FAA on planning feasibility and airspace studies on and off airport property. She also brings over 20 years of GIS and civil drafting/design experience to our team and assists with project design and construction plan production. With her detailed-oriented, strong analytical and problem-solving skills, she assists clients with the planning of their airport projects.

EDUCATION:
FAA Airport Planning – FAA Academy, 2020

B.S., Geography – Northwest Missouri State University, 1993

PROFESSIONAL EXPERIENCE:
Kirkham Michael, since 2016
Other firms, 16 years

SUSAN BEAUCHAMP
PROJECT COORDINATOR

Susan is our airport project coordinator. She ensures our team and resources are used efficiently and appropriately while monitoring schedules. Susan's administrative experience includes document management, issuing payment estimates, and construction administration. She ensures Davis Bacon requirements are met, processes change orders, and completes FAA required weekly reports during construction.

EDUCATION:
FAA Airport Planning – FAA Academy, 2020

B.S., Business Administration - University of Nebraska, Lincoln, 1988

PROFESSIONAL EXPERIENCE:
Kirkham Michael, 2006
Other Firms, 14 Years

KEY PERSONNEL- SUBCONSULTANT

CGA
ENGINEERS • LAND SURVEYORS

CGA was built on solid engineering and surveying principles over 60 years ago. Although we have great respect for tradition, we have stood the test of time by our ability to not only adapt to ever-changing project management models, communication methods, design platforms, and construction methods, but to lead the industry in technology advances while tapping into the tried and true. We strive to serve you and your community in the best way possible and look forward to delivering a final product that you will be proud of.

CGA has been involved in aviation engineering for over 50 years and has served as airport consultants to over 40 of Iowa's general aviation facilities. Our proven expertise in the planning, design, and construction of all types of airport facilities has awarded us repeat aviation contracts.

GARRETT JACOBS, E.I.
PROJECT ENGINEER

CGA
ENGINEERS • LAND SURVEYORS

Garrett has two years experience in civil/aviation engineering. He will assist with the design and plan preparation, as well as construction administration of your airport improvement projects. His relevant experience includes:

- Decorah Municipal Airport entrance road
- Marshalltown Municipal Airport hangar, terminal, and site improvements
- Creston Municipal Airport Runway 16/34 reconstruction
- Newton Municipal Airport parallel taxiway reconstruction
- Vinton Veterans Memorial Airpark Runway 9/27 rehabilitation

EDUCATION:
B.S., Civil Engineering – Iowa State University, 2019

REGISTRATIONS:
Engineering Intern – IA

PROFESSIONAL EXPERIENCE:
CGA, 2019

JOSH DANK
PROJECT COORDINATOR

CGA
ENGINEERS • LAND SURVEYORS

Josh has seven years experience in design and construction management of aviation projects. His work entails grant and contract administration, Construction Management Program (CMP) requirements, documentation, and scheduling. His relevant experience includes:

- Grinnell Municipal Airport runway rehabilitation and fueling improvements
- Northeast Iowa Regional Airport (Charles City) partial parallel taxiway reconstruction
- Forest City Municipal Airport ramp lighting
- Decorah Municipal Airport reconstruct parallel taxiway

EDUCATION:
B.S., Industrial Technology Management with a Building Construction Management Emphasis (minor in Business Administration) – University of Wisconsin, Platteville, 2017

REGISTRATIONS:
N/A

PROFESSIONAL EXPERIENCE:
CGA, 2020
Other Firms, 6 Years

KNOWLEDGE OF FAA STANDARDS, POLICIES, & PROCEDURES

Keeping a dedicated team, we are able to devote airport planners, designers, engineers, administration, and construction staff solely to this discipline, keeping this team on top of current FAA design and construction standards.

To enhance our team's knowledge with FAA planning standards, *the Kirkham Michael aviation team has completed FAA Airport Planning/Design Criteria (Course 06401)* through the FAA Academy in Oklahoma City. This program provides education from A to Z in airport planning and design. *We continually participate in FAA and state conferences and seminars* to help better the industry and educate our staff on any updated FAA AIP planning regulations for airport design and construction standards.

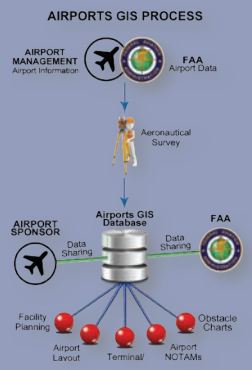
Our knowledge of FAA and IaDOT policies and procedures extends to all aspects from planning to project closeout.

KEY COMPONENTS OF THE FAA AIRPORT PROGRAM AND GUIDANCE

- Airport Environmental Program
  - Categorical exclusions
  - Noise compatibility planning
  - Compatible land use
  - Solar glare hazard analysis
- Airport Safety
  - Foreign Object Debris program
  - Reducing runway incursions
  - Wildlife hazard mitigation
  - Safety during construction
  - Obstruction identification and mitigation
- Engineering, Design, and Construction Standards
  - AGIS program/aeronautical surveys
  - Pavement design and construction
  - Airport lighting/navigational aids
  - Obstruction evaluation/airport airspace analysis
  - Open or close an airport or runway
  - Accessible facilities
  - Runway, taxiway, and apron requirements
  - Modifications of standards
  - Instrument approach development
  - DBE program
- Planning and Capacity
  - Local airspace zoning
  - ALPs/master plans
  - Land acquisition
- Funding Assistance
  - Airport Improvement Program (AIP)
  - Funding plans
  - Grant applications/payments

Airports-GIS (AGIS)

The Next Generation Air Transportation System (NextGen) is a comprehensive, ongoing transformation of the U.S. Nation Airspace System (NAS). It will meet future demands while improving safety and reducing aviation's environmental impact. The FAA collects airport and aeronautical GIS data to develop satellite-based approach procedures, electronic airport obstruction charts, and electronic ALPs.



Prior to the runway project at Lyons-Rice County Municipal Airport and during the ALP Update at Broken Bow Municipal Airport, Kirkham Michael recommended incorporating GIS to allow for future improvements at these airports. Ultimately, AGIS was approved by the FAA and has provided many benefits including improvements to the instrument approach systems.

HISTORY OF MEETING SCHEDULES & STAYING WITHIN BUDGET

Kirkham Michael has a well-documented history of maintaining tight control of project schedules and budgets. Our team has developed a successful approach to working with airport managers, board members, and community members to plan and design the most cost-effective solutions to fit their airport facilities' needs and budgets.

Cost control procedures are an essential aspect of every airport project at Kirkham Michael. We have established the following steps and procedures for this purpose:

- Records are compiled and maintained on previous projects that indicate contractor's bids and itemized costs. These records are available for use by our designers and estimators.
- Obtain cost estimates from contractors engaged in airport construction projects. The project manager checks all cost estimates for completeness and accuracy.

A significant part of our success is meeting and even exceeding schedules and budgets.

- Our team maintains a list of contractors and distributes notices to numerous prospective bidders on each project.
- We strive to minimize change orders and reduce unnecessary client expenditures throughout the construction period through attention to detail and excellent communication with the airport sponsor and the contractor.
- Contractor's payment requests are monitored carefully, ensuring that the contractors have completed the work, furnished the materials, and that all stored items are on site before payment is issued.
- Per the contract documents, bonds and insurance certificates are required and maintained throughout the contract period.

A summary of demonstrated project delivery of schedules and final project budgets is provided below.

SUMMARY OF DEMONSTRATED PROJECT DELIVERY OF SCHEDULES AND FINAL PROJECT BUDGETS

AIRPORT PROJECTS	MEETING OR EXCEEDING DESIGN SCHEDULES	FINAL PROJECT COSTS
Ottumwa Regional Airport | Runway 13/31 improvements	5 days early	$2,000,000 under original budget
Ottumwa Regional Airport | Apron improvements phases 1-3	5 days early	On budget
Manchester Municipal Airport | Apron expansion	3 days early	On budget
Manchester Municipal Airport | Slurry seal	2 days early	$3,000 under original budget
Pocahontas Municipal Airport | Runway overlay rehabilitation	5 days early	On budget
Pocahontas Municipal Airport | Snow removal equipment	On time	On budget
Pocahontas Municipal Airport | Runway lighting improvements	3 days early	On budget
Harlan Municipal Airport | Runway and taxiway concrete overlay	2 days early	On budget
Harlan Municipal Airport | Lighting improvements	2 days early	$4,000 under budget
Osceola Municipal Airport | CE and wetland determination	4 days early	On budget
Osceola Municipal Airport | Land acquisition	6 days early	On budget
Broken Bow Municipal Airport | Keith Glaze Field | Runway reconstruction	40 days early	$100,000 under budget

CAPABILITY TO PERFORM ALL ASPECTS OF THE PROJECT

Our 75 years of knowledge of the FAA and IaDOT Bureau of Aviation policies and procedures extends through all aspects of the project, from the initial planning stage to project and grant closeout. Our staff has successfully assisted numerous airport sponsors with all steps of the project process, including but not limited to the following:

- Sponsor certifications
- Airport Capital Improvement Plan (ACIP) development
- Benefit/cost analysis
- Disadvantaged Business Enterprise (DBE) program
- Aeronautical survey/Airports-GIS
- FAA 7460 coordination (airspace)
- Instrument approach development
- Environmental reviews
- Project development (engineering and design)
- Project plans and specifications
- Project bidding
- Construction administration and observation
- Grant/project closeout

Kirkham Michael has 75 years of airport planning, design, and construction experience. By keeping a dedicated aviation team, we devote airport planners, designers/engineers, and construction staff solely to this discipline while keeping this team on top of current FAA standards.

Projects may require a DBE goal under federal requirements. Our team will make a good faith effort towards meeting any DBE goal.

Our construction observation service includes:

- On-site observation (inspection) during construction
- Material testing
- Construction safety reporting
- Weekly and daily reports
- DBE monitoring
- Shop drawing review
- Monitoring of the Davis Bacon wage requirements

Our staff has the required training, accreditations, certifications, and experience to be certified FAA construction observers. This includes material testing for concrete and asphalt paving, earthwork, and base course placement. We place construction observers on-site full-time during construction activities to confirm projects are being constructed to FAA, state, and locally approved plans and specifications. These practices provide a cost-effective solution for controlling budgets and expenses.

PARTIAL SUMMARY OF AIRPORT PROJECTS

	Planning/ACIP	Design	Construction	Environmental	Land Acquisition	AUP	AGIS	Runway	Taxiway	Taxilane	Apron	Lighting/NavAids	AWOS/ASOS	Hangar Rehab	Hangar	SRE Building	SRE (Equipment)	Fuel System/SPCC	Access Roads	Marking	Pavement Eval.	Slurry/Asphalt	Concrete Rehab	Concrete
Corning	✚	✚	✚															✚						
Cresco	✚			✚		✚																		
Harlan	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚		✚						✚	✚		✚	✚
Manchester	✚	✚	✚	✚	✚	✚		✚	✚		✚									✚	✚	✚		
Osceola	✚	✚		✚	✚			✚	✚		✚									✚			✚	✚
Ottumwa	✚	✚	✚			✚	✚	✚	✚		✚	✚			✚			✚		✚	✚	✚	✚	✚
Pocahontas	✚	✚	✚		✚			✚	✚	✚	✚	✚					✚			✚	✚	✚		✚
Albion	✚	✚	✚			✚		✚	✚	✚	✚				✚					✚	✚		✚	✚
Broken Bow	✚	✚	✚	✚	✚	✚	✚	✚	✚		✚			✚	✚					✚	✚		✚	✚
David City	✚	✚	✚	✚				✚	✚	✚	✚				✚			✚		✚	✚	✚		✚
Falls City	✚	✚	✚	✚	✚	✚		✚	✚	✚	✚	✚		✚		✚		✚	✚	✚	✚		✚	✚
Hastings	✚	✚	✚	✚		✚		✚			✚	✚	✚	✚	✚	✚				✚	✚		✚	✚
Hebron	✚	✚	✚	✚	✚	✚		✚	✚	✚	✚	✚	✚		✚	✚		✚		✚	✚		✚	✚
Superior	✚	✚	✚	✚	✚	✚		✚	✚	✚	✚	✚			✚			✚		✚	✚		✚	✚
Hugoton	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚	✚						✚		✚	✚	✚		✚
Lyons	✚	✚	✚	✚	✚	✚	✚	✚	✚		✚	✚	✚		✚					✚	✚	✚		✚
Ness City	✚	✚	✚	✚	✚	✚	✚	✚	✚		✚	✚	✚		✚					✚	✚	✚		✚
Phoenix	✚	✚										✚									✚	✚		

QUALITY OF PREVIOUS AIRPORT PROJECTS UNDERTAKEN

Our quality planning and design has been recognized throughout the Midwest. Since 1946, our aviation team has had great success with numerous FAA-funded airport projects throughout the FAA Central Region. This includes all types of airport projects that give us the knowledge to produce quality plans for a variety of airport projects. Our airport engineers have conducted extensive pavement evaluation and life-cycle cost analyses for projects in Nebraska, Iowa, and Kansas that have received state and national award recognition. This includes the States of Kansas and Nebraska for Best Airport Planning, Design, and Constructed Projects. Examples of award-winning airport projects for new concrete construction, concrete overlay, and other concrete pavement rehabilitation include:

CONCRETE DESIGN & PAVING STATE & NATIONAL AWARDS

- Runway 15/33 Extension and Concrete Overlay | Albion Municipal Airport, Nebraska *"First Whitetopping Project in the State"* | State and National Awards
- Runway 13/31 Reconstruction | Ottumwa Regional Airport *"Special Recognition For Design And Workmanship"*
- Runway 15/33 Concrete Overlay | Harlan Municipal Airport
- Runway 17/35 Construction | Ness City Municipal Airport
- Runway 17R/35L Rehabilitation | Lyons/Rice County Municipal Airport
- Runway 14/32 Rehabilitation | Keith Glaze Field | Broken Bow Municipal Airport
- Runway 16/34 Extension and Widening | Seward Municipal Airport
- Runway 13/31 Reconstruction and Widening | Searle Field | Ogallala Municipal Airport
- Runway 14/32 Reconstruction, Extension, and Widening | Superior Municipal Airport
- Taxiway and Apron Improvements | Larry Reineke Field | Central City Municipal Airport
- Runway, Taxiway, and Apron Improvements | Brenner Field | Falls City Municipal Airport


Runway 15/33 Concrete Overlay
Harlan Municipal Airport

Runway 13/31 Reconstruction
Ottumwa Regional Airport


Parallel Taxiway
Central City Municipal Airport

Runway 15/33 Rehabilitation
Albion Municipal Airport


Runway 14/32 Rehabilitation
Keith Glaze Field, Broken Bow Municipal Airport

REFERENCES

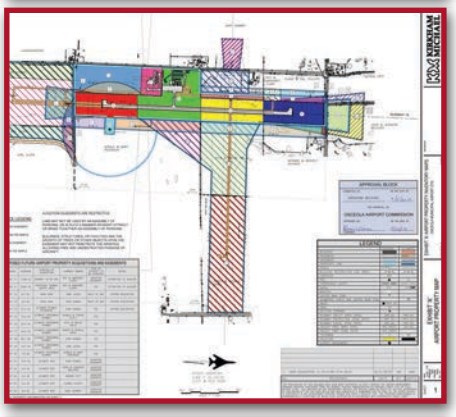
Our reputation is based on our service to our clients. For 75 years, airports have relied on Kirkham Michael to provide quality, innovative, and cost-effective solutions for their airport improvement projects. Our reputation is based upon our service to our clients and ability to successfully complete projects. We invite you to contact the following references to attest to our professional capabilities and firm reputation.

CONTACT:
Gene Gettys
City Administrator
City of Harlan
712.755.5137
ggettys@cityofharlan.com

HARLAN MUNICIPAL AIRPORT
- Airport planning, Airport Capital Improvement Plan (ACIP)
- Grant applications/administration
- Land acquisition
- Runway, taxiway, and apron crack repair and joint sealing
- Parallel taxiway

CONTACT:
Ty Wheeler, City Administrator
City of Osceola
115 North Fillmore Street
Osceola, Iowa 50213
641.342.2377
twheeler@osceolaia.net

OSCEOLA MUNICIPAL AIRPORT
- Airport planning, Airport Capital Improvement Plan (ACIP)
- Grant application/ administration services
- Land acquisition
- Environmental Assessment (EA)
- Runway, taxiway, and apron crack repair and joint sealing



CONTACT:
Jeff Sisson
North Cedar Aviation Authority Chairman
City of Charles City
641-228-3553
theneiowaregionalairport@yahoo.com

NORTHEAST IOWA REGIONAL AIRPORT – CGA and KM Client
- Taxiway reconstruction
- Replace beacon
- Ramp security lighting
- Apron reconstruction
- Construct hangar

CONTACT:
Tim Vick
City Manager
Manchester Municipal Airport
563.927.3636
tvick@manchester-ia.org

MANCHESTER MUNICIPAL AIRPORT
- Airport planning, Airport Capital Improvement Plan (ACIP)
- Grant applications/administration
- Land acquisition
- Runway, taxiway, and apron crack repair and joint sealing
- Apron expansion

Read what our clients say about us...

To be proactive with identifying any complications, we annually send questionnaires to clients and ask them to "evaluate" our engineering work and ask about our customer service. We ask them to "grade" our work. Some of their comments are listed below.

"Kirkham Michael is on top of all FAA regulations."

-Brad Ahern
Airport Manager
Falls City Municipal Airport

"These folks have been super good to work with and are the driving force behind us being able to completely rebuild KPOH, using federal and state dollars over several years. Nearly every aspect of the project has been replaced before any serious safety issues arose."

- Mr. Gary McCartan,
Airport Commission Chairman
Pocahontas Municipal Airport.

"An 'A' easily, if I'm out in the business world, Kirkham Michael is the one I promote. We get great customer service.

Kirkham Michael goes the extra mile, more so than I see from other firms. We always get a quality product from Kirkham Michael."

- Gary Jorn
City Administrator
Falls City Municipal Airport

Kirkham Michael's aviation team has always been clearly focused on the vision and success of our projects and have a thorough understanding of the aviation process required to develop these projects

- Taylor Matteson,
Former Manchester Municipal Airport Manager.

"They did a great job on the runway expansion and overlay project."

- Ralph Goodnight,
Community Development Director
Kearny County Airport

"CGA's professional style of communication has been and continues to be the key to completing projects on time and on budget."

- Jeff Sisson, North Cedar Aviation Authority Chairman

The Kirkham Michael aviation experts give outstanding attention to detail and address the needs of our clients through the years, clients have given us an "A" rating in service and personal attention to their airports.

KIRKHAM MICHAEL Office Locations:

OMAHA OFFICE
12700 West Dodge Road
Omaha, Nebraska 68154
402.393.5630

LINCOLN OFFICE
5621 NW 1st Street, Ste. 400
Lincoln, Nebraska 68521
402.477.4240

YORK OFFICE
611 North Lincoln Avenue
York, Nebraska 68467
402.362.7117

URBANDALE OFFICE
4390 114th Street
Urbandale, Iowa 50322
515.270.0848

ELLSWORTH OFFICE
217 North Douglas
Ellsworth, Kansas 67439
785.472.3163

CHENEY OFFICE
217 North Main Street
Cheney, Kansas 67025
785.472.8785

GARDEN CITY OFFICE
224 East Fulton Terrace
Garden City, Kansas 67846
620.266.3111

HAYS OFFICE
Hadley Center
205 East 7th Street, Suite 323
Hays, Kansas 67601
785.472.9904