



KSA

A · DYNAMIC · PERSPECTIVE

AVIATION

A DYNAMIC PERSPECTIVE SINCE 1978.

KSA crafts sound engineering designs that give our clients the practical solutions they need. We are a team of problem-solvers equipped with the tools necessary to cost effectively improve your airport. Our approach to aviation engineering and planning is holistic. We take on each project with future projects in mind, thereby ensuring our clients are always prepared for their next need or development opportunity.

AIRPORT PLANNING AND DESIGN

Our staff has completed aviation projects for airports across the nation, ranging in size from small general aviation airports to medium hub commercial service airports. Our approach goes beyond applying Federal Aviation Administration (FAA) design standards. We believe every airport has a unique mission — whether that be meeting the needs of the recreational flying community, acting as an economic catalyst for the region, accommodating corporate aircraft, or providing access to a strong commercial service — our airport engineers and planners incorporate your mission into each and every assignment.

ESTABLISHED RELATIONSHIPS WITH THE FAA AND STATE AVIATION PROFESSIONALS

We have solid relationships with state and federal aviation staff and understand their needs and expectations. This understanding has made us experts, not only with how to apply design standards and requirements, but also with how to smoothly maneuver a project through the funding and approval processes. We use our knowledge of grant procedures to ensure our projects meet operational performance and physical requirements, while maximizing state and federal aviation funding. Funding agencies want your airport to succeed. We ensure they have all of the necessary information to approve your project and make it a reality.

With one of the largest and most respected aviation design groups located in the FAA's Southwest Region, our aviation engineers, pavement specialists, planners, designers, CAD technicians, GIS specialists and project representatives work on a diverse mix of aviation projects every single day. We will competently guide your project from start to completion.

LONGEVITY

There's something comforting about long-lasting relationships. KSA has nurtured numerous professional relationships that have endured for decades. We have become a part of their communities and invest in their livelihood. We provide solid, common sense engineering, planning solutions and excellent customer service, and they provide us with the pleasure of their repeated business. At a number of airports we have provided 20+ years of excellent project service. We stand with our clients at every turn, bringing them practical solutions as well as access to our large pool of aviation contacts.

ABOUT KSA

KSA is an industry leader, providing a broad range of consulting, management, engineering, architecture, planning, surveying and construction administrative services since 1978. At KSA, excellent client service is a part of our culture. We provide the type of service that will make you want to call on us again and again.



Planning

Every airport needs vision. The difference between success and failure is usually in the plan... or the lack thereof. In today's complex aviation world, planning is essential. What sets the KSA team apart from other consultants is the fact that we implicitly include planning in every assignment. As our project engineers design, they consult our planners to make sure the project is sustainable and won't hinder the airport's future development.

MASTER PLANNING

We are experts at helping airports devise a realistic and relevant plan. Airport master plans provide a 20-year vision for an airport. When used correctly, a master plan is a powerful tool that can simplify the implementation of essential airport improvements and become a catalyst for the success of the airport system as a whole. Undertaking a master planning process will ensure that development at your airport progresses in a logical and feasible manner. Proper planning is often the first step in obtaining funding support for airport improvements.

AIRPORT LAYOUT PLANS (ALP)

An airport's layout plan is one of its most important documents. It not only depicts existing airport facilities, but future facilities as well. Before a project can be considered for funding assistance, it must be depicted on the ALP. ALPs are one of the few items the FAA reviews and approves from both a land and airspace perspective. We can help you create and maintain this important document to facilitate growth and convenience at your airport.

TERMINAL AREA PLANS, BUSINESS PLANS AND ECONOMIC DEVELOPMENT PLANS

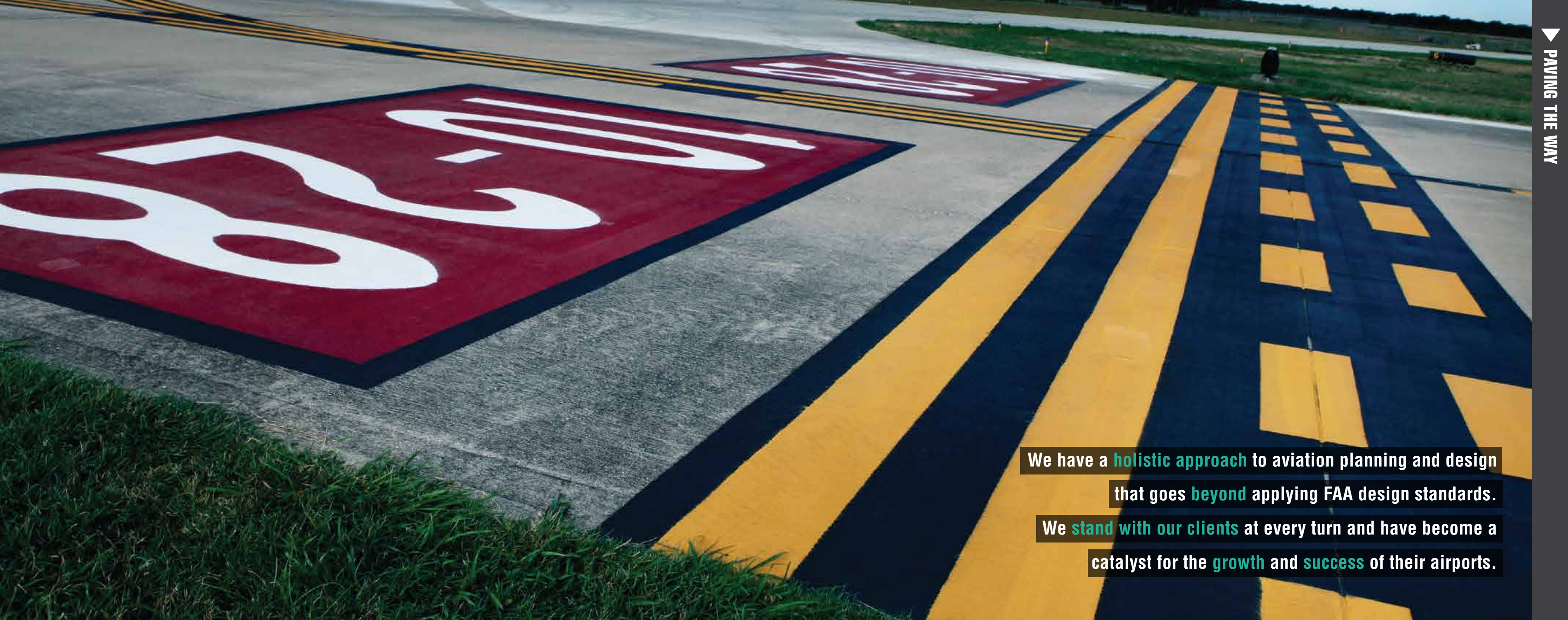
The KSA planning team can skillfully prepare studies that complement or supplement master planning reports like terminal area, business and economic development plans. Terminal area plans focus on the responsible growth of your airport's landside environment and are often needed after land acquisition, or as a result of a community's changing economic environment. Business plans are often created before the master planning process to provide your airport with a suitable means of considering its external influences. Economic development plans assess your airport's external influences in order to identify ways the airport can assist with the goals and objectives of the community as a whole.

ENVIRONMENTAL PLANNING

Prior to obtaining governmental approvals or funding for a project, an environmental evaluation of the project's impact is often required. When funding assistance is not needed, this evaluation can be relatively simple and the process can proceed rather quickly. When airport funding assistance is needed, however, the environmental process can become more burdensome as it will include a project justification component. KSA experts can guide you through these processes with ease to ensure your project is properly evaluated and justified in a timely fashion.

EVERY AIRPORT NEEDS VISION.





We have a **holistic approach** to aviation planning and design that goes **beyond** applying FAA design standards. We **stand with our clients** at every turn and have become a catalyst for the **growth and success** of their airports.

Airside

Every airport has its own identity. We work hard to make sure your airport meets the demand of its unique community. We take the time to understand your airport system and deliver practical engineering designs that meet your needs and comply with local, state and FAA standards.

PAVING

Our knowledge and experience with airfield paving assignments sets us apart from the rest. In addition to using FAA pavement design criteria, our pavement specialists and project engineers carefully consider operational impact during construction and design for minimal interference. We also work with airport management and stakeholders to integrate form and economy into each pavement design. As it becomes more difficult to acquire aviation funding assistance, our pavement experts give us an edge over the competition by providing economically sound, fundable pavement designs.

NAVIGATIONAL AIDS AND LIGHTING

Pilots often rely on navigational aids (navaids) to safely maneuver to and around the runway. Many types of navaids are available today, each offering specific benefits to the pilot. It's our job to consider your users, sight lines, imaginary surfaces, height clearances and landscape to create thoughtful navaid recommendations. We have purposefully hired airport engineers and planners that are commercial flight rated to provide us with a dynamic perspective we wouldn't otherwise have. We see airport projects as they should be seen: from the sky!

Airfield lighting includes runway and taxiway edge lights and supporting lighting communication systems like electrical vaults. These are important components of your airport lighting system. KSA stays on top of emerging trends and new technologies. Our electrical engineers have designed systems using LED options as well as traditional incandescent systems.

EVERY AIRPORT HAS ITS OWN IDENTITY.

Landside

Every airport needs support. When it comes to landside development, we work to maximize the resources available to the airport system, while minimizing costs. We will investigate every potential income opportunity and use those resources to bring in additional streams of revenue to support your airport.

STRUCTURES

Aviation structures are as wide-ranging as the communities they serve. Each building has its own set of requirements. Terminals, for example, have to grant both landside and airside access and be large enough to comfortably accommodate the flow of travelers, cargo and airport staff and equipment. Hangars must be suitably sized to house specific aircrafts and built to meet the demand at your airport. KSA's aviation team has vast experience with each and every type of structure located at your airport. Each day we are consulted regarding the location, cost and need for landside airport structures around the country.

PARKING

Airport parking is an integral means of support to the airport system. It can provide a revenue source and contribute heavily to the overall impression of the airport. Because they are constantly in use, great care must be taken to ensure the parking area is functional even during repair and maintenance. When designing parking systems for airports, we understand the importance of considering the parking demand as well as the ideal geographic location to facilitate optimal flow to and from your airport.

FENCING

Fencing is essential for the safety and security of facilities and operations at your airport. When designed and installed properly, fencing can reduce the need for ongoing maintenance and diminish the presence of unwanted intruders like burrowing animals – even humans. Each category of intruder requires a specific solution. Utilizing a wildlife hazard assessment, we can help identify the type of intruder prevalent near your airport and design a custom fence to safeguard the airport.

EVERY AIRPORT NEEDS SUPPORT.

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