• HASTINGS MUNICIPAL AIRPORT LAYOUT/MASTER PLAN OVERVIEW (ALP)

• HANGAR OPTIONS

July 20th, 2016
Our Aviation Team are more than planners and engineers. We are pilots, aircraft owners, and users of the aviation system.
The Airport Layout Plan (ALP) serves as a critical planning tool that depicts both existing facilities and planned development for an airport. Sponsors of airport development carried out at federally obligated airports (NPIAS) must accomplish the improvement in accordance with an FAA-approved ALP.

Sponsor Assurance Number 29 addresses the Sponsor obligation for ALPs. In general, updates are required anytime an improvement is made to a runway/taxiway system addition of buildings and new safety standards are incorporated. Typically for airports such as Hastings, an update should happen about every 7 to 10 years. The last update for Hastings was in 2007.

By definition, the ALP is a plan for a specific airport that shows:
1. Boundaries and proposed additions to all areas owned or controlled by the Sponsor for airport purposes
2. The location and nature of existing and proposed airport facilities and structures
3. The location on the airport of existing and proposed non-aviation areas and improvements thereon.

The ALP is designed to show improvements as identified in Items 1-3 above and for 0-5, 6-10, and 11-20 year time frames.
• **Critical Aircraft Most Demanding**
  *(500 Annual Ops by Itinerant)*
  – Determines all standards for design including runway lengths and instrument approaches
  – Also includes apron and taxiway sizes
  – Two components (approach speed and airplane design group)
    1. **Approach Speeds**
       – A - Approach speed less than 91 knots
       – B - Approach speed 91 knots or more, but less than 121 knots
       – C - Approach speed 121 knots or more, but less than 141 knots
       – D - Approach speed 141 knots or more, but less than 166 knots
• **Critical Aircraft Most Demanding**  
(500 Annual Ops by Itinerant continued)

(2) Airplane Design Group

- Group I < 49'
- Group II 49’ - < 79’
- Group III 79’ – < 118’
- Group IV 118’ - < 171’
- Group V 171’ - < 214’
- Group VI 214’ < 262’
Critical Aircraft for Hastings

- C-II
- C Approach speed 121 knots or more, but less than 141 knots
- Group II 49' - < 79'
- Learjet 55 or similar
- Required Min Runway Length and Width 5,500’ x 100’ LDA (Strength 36K Single Wheel, 58K Dual Wheel 106K Dual tandem)
  - TORA 14 5,550’ 32 6,451’
  - TODA 14 6,451’ 32 6,451’
  - ASDA 14 5,500’ 32 6,451’
Existing RWY 14 Approach Plan
Existing and Ultimate RWY 32 Approach Plan
Existing and Ultimate RWY 4 Approach Plan
Existing and Ultimate RWY 22 Approach Plan
RWY 14/32 and RWY 4/22 Plan and Profile
Land Use Plan

LEGEND

HAZARD ZONE
EMERGENCY EVACUATION ROUTE
EMERGENCY REFUGE POINT
HOSPITAL
LIBRARY
MUSEUM
RECREATION CENTER
PUBLIC LIBRARY
PUBLIC PARK
PUBLIC RESTROOM
RETAIL/SHOPPING CENTER
SCHOOL
SPORTS COMPLEX
TRANSPORTATION CENTER
WATER TREATMENT PLANT
WATERFRONT DEVELOPMENT
• **Capital Improvement Program**
  – Updated each December due to NDA/FAA end of January
  – Current List
    • 2016 4/22 PAPIs, marking, terminal lighting new beacon
    • 2019 6 place t-hangar (state loan)
    • 2020 Equipment maintenance building
    • 2021 Partial parallel taxiway to Runway 32, acquire land for 4/22 approaches, and BRL for 14/32
    • 2021 Rehab asphalt apron
    • 2024 Expand apron
    • 2028 Perimeter fencing
Partial Par Taxiway 32 and Apron Rehab Expansion
BRL 14/32 and 4/22 Land
• **Funding Options**
  – State of Nebraska aviation grant or loan programs
  – Federal Aviation Administration (must be shown on ALP)
    90% grant / 10% local match
  – State apportionment
  – FAA Central Region Discretionary
  – General Aviation Entitlement funds
    – $150,000 per year up to 4 years (total not-to-exceed $600,000)
Hangar Options
- T-Hangars
- Open Bays
- Combinations
CONCEPT #1
6-UNIT STANDARD T-HANGAR
Hasting Municipal Airport
Hastings, NE
3-Unit RG50-50
February 24, 2016

Out-of-out of concrete is 51’11” x 151’11” or 7,600 sq. ft.
Hasting Municipal Airport
Hastings, NE
2-Unit RG70-75
February 24, 2016

Out-to-out of concrete is 71'1" x 151'1" or 10,632 sq. ft.