Eastern Region Airports Division Airport Layout Plan (ALP) Policy

The intent of this policy is to supplement and highlight FAA guidance on planning activities found in Advisory Circulars and Orders. The purpose of the ALP Policy is to provide the framework to be used by the Airport District Office (ADO) and the Airport Sponsor or designee to facilitate the final checklist and scope of work for the ALP set.

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I. Airport Layout Plan Background

A. FAA Leadership in Airport Planning

Airports Division's challenge in the 21st Century is to provide leadership in airport planning. FAA leadership at the planning stage of a project can reduce the level of effort needed in the later phases of project development and implementation by identifying and resolving potential problems before they occur. The ALP review and approval process is a primary means for the ADO/State Block Grant project manager/ planner to provide leadership in airport planning.

The role of the ADO/State Block Grant project manager/planner in the airport planning process is to:

- 1. Identify airports of federal interest needing planning studies to address capacity, safety, security, or other issues, and encourage airport sponsors to initiate these studies;
- 2. Provide guidance to the airport sponsor in tailoring the scope of work for the planning project to fit the needs of the individual airport (For example, a detailed capacity analysis may not be required for a small airport);
- 3. Educate airport sponsors on the importance of the ALP in the FAA's and airport owner's decision-making processes regarding the operation and development of the airport (ex. ACIP formulation, airspace reviews, etc.); and required by the grant assurances.
- 4. Review and approve the ALP to ensure the proposed development maintains the safety, utility, and efficiency of the airport and that it meets airport design standards.
- 5. Review and approve aviation forecasts to ensure sponsor forecasts are within the required percentage and the established timeframe of the TAF, so that actual and planned projects at the airport have a basis for airport development on the ALP. The forecast should include all relevant aviation demand elements, such as critical aircraft, operations, based aircraft, and, type and level of aviation activity

B. Partnership

The airport sponsor works in partnership with the FAA to maintain a safe, efficient and effective aviation system. In order to facilitate this effort in the planning process the sponsor needs to:

- 1. Work with the ADO in developing the final checklist of items required to establish the ALP scope of work by providing a draft checklist of items to began the process of the ALP.
- 2. Provide a complete ALP set as delineated in the agreed upon scope of work executed by an authorized official.
- 3. To present the pertinent backup information and data essential to the development of the ALP set.
- 4. To provide a clear and concise report so future airport development can be understood by the community, authorities, and public agencies that need to approve, promote, and make funding decisions on proposed and future development projects.

C. What is an ALP?

1. Definition:

"An Airport Layout Plan (ALP) is a scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport...."

2. Significance of the ALP

There are five primary functions of the ALP that defines its purpose:

- a. to receive financial assistance under the terms of the Airport Improvement Program and to receive Passenger Facility Charges;
- b. it creates a blueprint for airport development in accordance with design standards and safety requirements;
- c. is a public document that serves as a record of aeronautical requirements both present and future;
- d. enables the airport sponsor and the FAA to plan for facility improvements;

e. serves as a working tool for the airport sponsor.

3. FAA Uses of the ALP

The FAA uses the ALP for the following:

- a. Shows the need, location and timing for future development.
- b. Aeronautical studies of proposals for the development of nearby airports and objects that may affect the navigable airspace, and proposals for on-airport development (OE/AAA and NRA cases).
- c. Siting of new and relocated FAA facilities and equipment (ATCTs, ASRs, NAVAIDs, etc.).
- d. Analysis of operational changes.
- e. Development or modification of airport instrument procedures.
- f. Determination of land needed for aeronautical purposes.
- g. Assist in determining AIP eligibility.
- h. Assure the airport meets FAA design standards.
- i. To protect against non-compatible land use.

Because the ALP will be relied upon for these uses, it is imperative FAA devote sufficient time and resources in reviewing the draft ALP to ensure that federal interests are addressed and any issues with planned airport development are identified and resolved with the Airport Sponsor.

Because the approved ALP represents an agreement between the airport sponsor and the FAA regarding how the airport will develop, it is also imperative that the airport sponsor develop the airport in accordance with the ALP. AIP grant assurance No. 29 states in part that:

"The sponsor will not make or permit any changes or alterations in the airport or in any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary..."

D. Whose ALP is it anyway?

The Airport Sponsor hereby assures and certifies, with respect to the ALP that, it will keep up to date at all times an ALP of the Airport and comply with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of federal funds noted within the grant agreement.

The ALP is the sponsor's plan for development of their airport. The plan needs to be realistic, be supported by information in the study, and provide for some justification, reason why there is a need for the development in order to be shown on the ALP.

The ADO/State Block Grant project manager/planner shall provide leadership and guidance to the airport sponsor through the ALP review and approval process in order to ensure that the FAA's interests are taken into account and that the safety, utility, and efficiency of the airport are maintained. If development is shown on the ALP that FAA determines is not supported by forecast, is unsafe, inefficient, not meeting standards within the planning period, the ADO should make the sponsor aware of this in writing and also note any future approval conditions. However, if the development meets all airport design standards it may be shown on the approved ALP. The Airport Sponsor should make every effort to ensure all development represented meets airport design standards and is updated with the latest (next five years) planning development.

E. When should an ALP be updated?

The ALP is a key document representing an understanding between the airport sponsor and the FAA regarding the current and future development of the airport, and will be used by the FAA, the airport sponsor, and other parties for planning and decision making activities. Therefore, it should be kept current, reflecting changes in the physical features on the airport and critical land use changes in the vicinity of the airport that may affect the navigable airspace or the airport's expansion capability.

For obligated airports, Federal Grant Assurance No. 29 states in part that the airport owner will:

"...keep up to date at all times an airport layout plan of the airport...".

ALP's should be reviewed and validated at least every 5 years for primary and reliever airports and ten years for general aviation airports. If the review indicates an ALP should be updated, the ADO/State Block Grant project manager/planner should contact the airport sponsor, asking them to update the ALP, as appropriate.

The project manager/planner should use judgment in determining when an ALP needs updating. Things that should be considered in making this determination are outlined below:

- 1. Does the existing ALP still accommodate the forecast aeronautical need?
- 2. Do the existing facilities and proposed development still meet FAA design standards? (i.e., has the design aircraft changed?)
- 3. Have FAA design standards significantly changed? AC 150/5300-13 states in part that:

"When FAA upgrades a standard, airport sponsors should, to the extent practicable, include the upgrade in the ALP before starting future development."

- 4. Have there been many physical changes to the airport (new construction, etc.) since the existing ALP was approved?
- 5. Have there been numerous interim "pen-and-ink" changes to the existing ALP?

Note: Pen and ink changes are informal revisions. They are minor improvements and/or minor in nature.

When reviewing the current year Capital Improvement Plan (CIP) for an airport, the project manager/planner should review the ALP to determine whether it is up-to-date and contains the projects proposed in the CIP. If the ALP needs updating, the airport owner should be advised to accomplish the update prior to grant or submission of a PFC application for use authority. The projects must be shown on the approved ALP before a grant may be issued or PFC application approved for use.

At the end of a major (significantly changes the geometrics of the ALP) development project it is required that the sponsor provide an updated or "as built" ALP illustrating the new development as existing facilities. This requirement should be discussed during the project scoping process.

II. Airport Layout Plan Checklist

Appendix A provides a copy of the Eastern Region Airport Layout Plan Checklist. The checklist follows the guidance in latest edition of AC 150/5070-6. The checklist shall be used for any ALP requiring FAA signature, except for pen and ink approval, for the following purposes:

- 1. To assist in the development of the scope of work for a new ALP or ALP update by the sponsor, consultant, and the FAA; the completed ALP checklist shall be attached to a scope of work for a master plan or ALP update with the necessary items checked off in the first column.
- 2. To assist the sponsor and consultant in preparing the ALP; the sponsor/consultant shall attach a copy of this checklist to a draft ALP submitted for approval with the second column, entitled "sponsor check" completed. Signature lines are provided so that the sponsor/consultant may certify that all the necessary items are included on the ALP drawing set.
- 3. And to assist the FAA reviewing the ALP; the FAA/State shall use this checklist when reviewing the ALP and check off the items in the third column entitled "ADO/AFO/State Check".

Note, items on the checklist are **optional** and should be included if the checklist attached to work scope specifies this. Other items identified on the checklist are required for all ALP submittals and are already checked in the first column. Based on this, the ADO/State need to be involved in the work scope development to ensure that the ALP Checklist is completed and includes all anticipated items that they feel will be required on the ALP drawing set for that particular airport.

At the end of the checklist for each drawing there are additional lines where items may be added as determined at the scope of work development stage.

A brief description of the purpose of each drawing is also provided to assist the sponsor/consultant.

III. Airport Layout Plan Drawing Set Standard Tables

Based on the ALP checklist, several standard ALP tables have been created including (see Appendix B):

- 1. Airport Data Table
- 2. Runway Data Table
- 3. Modification of Standard Table
- 4. Legend
- 5. Facilities Table

- 6. Reserved for future use.
- 7. Declared Distance Table
- 8. Obstruction Table
- 9. Property Acquisition Table
- 10. RPZ Control Plan Table
- 11. Standard FAA ALP Notes and Disclaimers

These tables are provided on the FAA Eastern Region internet site http://www.faa.gov/airports/eastern/planning_capacity/ in excel to be used by consultants and sponsors. The tables are to be used in developing the ALP to promote consistency. The items in the tables correspond to the checklist. If items in the table do not apply, N/A may be entered in the table.

IV. ALP Coordination

The ALP drawing set shall be reviewed by the sponsor to ensure comment and graphic depictions correctly represent the goals of the sponsor before submitting to the FAA.

For subsequent Sponsor submitted pen and ink changes, these are informal revisions and should be noted on the ALP based on supporting documentation rather than requiring and re-approving drawings for as-built condition. Note the ADO may also require revisions to any drawing at any time to provide working tools that would not be approved. Per the latest Advisory Circular 5100.38 the supporting documentation should identify sponsor and FAA documents that approve the revision, and any safety implications of the change must be described. It may be approved by a simple letter or as part of an NRA case response by the FAA.

V. ALP Survey Advisory Circular Requirements

ALP surveying requirements will be performed in accordance with the agreed upon checklist deliverables. ALP standard mapping and construction for surveying must be performed in strict accordance with the requirements contained in the latest edition of the following Advisory Circulars: 150/5300-16, General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey; 150/5300-17, General Guidance and Specifications for Aeronautical Surveys: Airport Imagery Acquisition and Submission to the National Geodetic Survey; and 150/5300-18, General Guidance and Specifications for Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards.

Runway Safety Area Determination

A Runway Safety Area (RSA) determination shall be made or revisited as part of a new ALP or ALP update. This is to ensure RSA standards are correctly depicted on the ALP.

VII. Signage Plan

Approved signage plans must be maintained for all Part 139 airports. Development such as new, redesignated, or realigned taxiways, taxi lanes, and runways

could affect the signage plan and will require a revision.

Note: In the ALP approval letter for all Part 139 airports the following sentence shall be included:

"Prior to initiating any development that may affect the signage of the airport a revised signage plan shall be submitted by the Airport Sponsor to Safety and Standards, AEA-620 for review and approval."

VIII. Environmental Inventory

It may be appropriate to conduct an environmental inventory as part of the master plan/ALP. The inventory would replace the Environmental Overview chapter in the master plan. An environmental inventory provides a baseline of all the environmentally sensitive area on and around the airport. As such, it assists in the planning for new facilities and in expediting the environmental review. It may be advisable to overlay all the sensitive areas on the existing and proposed airport development and display this on an additional drawing or "Environmental Inventory" in the ALP drawing set. The Environmental Inventory drawing should be the same scale as the ALP, should clearly show proposed development and any sensitive environmental areas on and around the airport. Land acquired for noise purposes to at least the 65 DNL shall be either depicted on the Airport property map or referenced in the land table. Air quality, threatened and endangered species, and other environmental categories that are difficult to display on a map can be described on the drawing with a note. The ADO/State Block Grant project manager can provide additional guidance on the Environmental Inventory drawing requirements.

FAA INTERNAL POLICY (Applies to FAA and/or State Block Grant Agency)

VIII. ALP Approval

Below is a summary of the actions that must be taken prior to ALP approval:

- 1. Review ALP.
- 2. Coordinate with other divisions and other agencies (if required).
- 3. Address all coordination comments.
- 4. Process all modifications of standards for approval.

An ALP update or new ALP should not be approved until all design standards are met or addressed through modification of standards approval.

A. Conditional ALP Approval

Typically the ALP is approved conditionally based on the condition that the appropriate environmental review and finding will be issued prior to development. The ALP approval letter for conditional ALP approvals should include the following statement.

"The approval indicated by my signature is given subject to the condition that the proposed airport development requiring environmental processing shall not be undertaken without prior written environmental approval by the FAA."

Additional airspace review must be taken prior to development when the exact heights, size and materials of any development are known. The following statement should also be included in the ALP approval letter.

"The FAA's approval of this ALP represent acceptance of the general location of future facilities depicted. The airport owner is required to submit for FAA approval exact locations of buildings, actual future heights and exterior finishes of future structures, which could adversely affect the safety efficiency and utility of the airport 60 days prior to construction. FAA's concern is for structures that would be an obstruction, would impact electronic aids, or at towered airports would adversely affect controller visibility of aircraft approaches and ground movement areas."

B. Updating the Obstruction Evaluation (OE) Database

- 1. During the review of the ALP the, AEA-620 or ADO, depending on the case (OE, NRA) will review the information in the OE database to confirm that it is correct as appropriate. This should be done when the ALP approval is eminent.
- 2. It is particularly important that the OE database reflect proposed runway extensions, and proposed instrument approaches to ensure protection of future approaches and airspace requirements.
- 3. All disparities in data between the ALP and the database will be resolved and result in a change to either the ALP or database as appropriate.

IX. ALP FAA Coordination

All new and updated ALPs are required to be coordinated with the other lines of business within the FAA. Coordination of ALPs by the ADO will be in accordance with the Eastern Service Area (ESA)-Airport Layout Plan Coordination Process and include Airport Sponsor.

X. Pen and Ink Change Approval

Pen and ink changes are informal revisions. It may be noted on the ALP based on supporting documentation rather than requiring and re-approving as-built condition. It may be approved by a simple letter or as part of an NRA case response depending on the effect of the change. Note the ADO may require revisions to any drawing at any time to provide working tools that would not be approved. The ADO/State's will copy the AEA-610 planner on all pen and ink change approval letters and provide a copy of the updated drawing if one is established to ensure the regional office has the latest ALP. Once an ALP update has been completed the previous pen and ink changes will be archived, as they should be incorporated in the ALP update.

XI. Ongoing ALPs

The Region will maintain a list of ongoing ALPs and other planning studies (master plans, obstruction studies, Part 150 Noise studies, system planning studies etc). In order to accomplish this, the ADO/State will copy the AEA-610 planner on scope of work approval letters. The AEA-610 planner will make sure that the planning study is included on the list of ongoing planning studies. In addition, once the ALP has been approved by the ADO/State and received by AEA-620 the project will be removed from the list. For other planning studies the study will be removed from the list of ongoing studies when the grant is closed out.