Attachment #2. Industry Cover Letter and Survey.

NORTH AMERICA ACI

AIRPORTS COUNCIL INTERNATIONAL

"The Voice of Airports"

To: Selected ACI-NA Official Representatives
From: R. Marchi
Subject: New Large Aircraft Survey
Date: September 16, 1997

FAA has been asked by Senator McCain to prepare an estimate of the costs which would be incurred by selected U. S. airports to bring the proposed New Large Aircraft (NLA) into service. FAA has asked ACI-NA to help gather this information and we are seeking your assistance in completing the attached survey.

The term "New Large Aircraft" is generally used to describe new products being considered by Boeing and Airbus which have wingspans and lengths substantially greater than today's 747-400 aircraft, will weigh up to 1.4 Million pounds and have seating capacities up to 500 - 800 passengers. The design standards which apply to these aircraft can be found in AC 150/5300-13, Design Group VI.

Your response to the survey should be prepared at a level of detail which is appropriate to planning studies. A full engineering cost analysis is not requested, but the estimates should be based on engineering cost factors used at your airport to support documents such as master plans, AIP preapplications, capital budgets, etc.

FAA has asked that you provide the cost estimates without regard for the difficulties that may exist at your airport in meeting the DG VI standard clearances when upgrading existing runways and taxiways. Where requested, you should provide the cost to widen runways or taxiways, relocate signs, re-mark, etc., even although you may not be able to achieve the recommended clearances to adjacent taxiways, buildings, etc. You should clearly note those cases where Design Group VI clearances cannot be maintained in your response.

We have been asked to expedite the information collection on this survey and would appreciate having your response by October 6, 1997 .

ACI-NA New Large Aircraft Survey

I. PRIMARY RUNWAY ENVIRONMENT. Upgrade your existing Boeing 747 primary runway to Design Group VI (DG VI) standards (width, shoulders, blast pads, entry fillets, lights, signs, etc.). In certain cases it may be more appropriate to construct a new DG VI runway (with parallel taxiway) rather than upgrading an existing runway. If that is the case at your airport, please provide the new runway cost estimate.

ASSUMPTIONS/INFORMATION: Assume existing runway lengths are adequate. For load bearing capacity, assume (a) existing runways are adequate and (b) new runways support the maximum takeoff operating weight of the Boeing 777-300. Section IV addresses bridges and culverts. For construction of a new DG VI runway/parallel taxiway, assume the site can support it, such as, sufficient separation.

INSTRUCTIONS FOR TABLES #1 and #2: Provide estimated costs for upgrades to existing runways under "Upgrade Primary Runway" in table #1. For design features currently satisfying DG VI standards, please state "Meets Stds." For construction costs for a new DG VI runway/parallel taxiway, use the column entitled "New DG VI Runway" in table #1 and for taxiway costs use the column entitled "New DG VI Taxiway Route" in table #2. For unlisted costs, such as, relocation costs for signs, lights, etc., use the row entry entitled "Other" and list the type of cost.

II. CROSSWIND RUNWAY ENVIRONMENT. Upgrade an existing crosswind runway to DG VI standards (width, shoulders, blast pads, entry fillets, lights, etc.) only if use of a crosswind runway is currently required to provide adequate wind coverage for existing Boeing 747 operations.

ASSUMPTIONS/INFORMATION: Use the same assumptions/information noted in section I.

INSTRUCTIONS FOR TABLE #1: Provide estimated costs for the runway in table #1 under the column entitled "Upgrade Crosswind Runway." For the supporting taxiway, provide costs in table #2 under the column "New DG VI Taxiway Route.". Use the same instructions as outlined in section I."

TABLE #1

ESTIMATED UPGRADE/NEW CONSTRUCTION COSTS: RUNWAY ENVIRONMENT IN HUNDRED-THOUSAND DOLLAR UNIT			
DESIGN FEATURE	UPGRADE PRIMARY RUNWAY	UPGRADE CROSSWIND RUNWAY	NEW DG VI RUNWAY
WIDTH			
SHOULDERS			
BLAST PADS			
OTHER List type of cost. For example, cost for new signs or lights.			
OTHER List type of cost.			

III. MINIMUM TAXIWAY ROUTE. Provide a single NLA taxi route meeting DG VI standards (width, shoulders, etc.) from the primary (and crosswind runway where necessary to achieve wind coverage) to the primary NLA terminal area. The majority of designated routes should result from upgrades as compared to new construction of an entire new taxi route. A single route implies separate takeoff/entrance and landing/exit taxi routes.

ASSUMPTIONS/INFORMATION: Assume (a) the designated taxiway meets the DG VI separation standards for taxiway to fixed/movable object standard, (b) no operational limitations on existing parallel taxiways (i.e., assume, except for new DG VI taxiway construction, adequate separation exists between existing parallel taxiways), and taxiway fillet design is based on cockpit over-centerline instead of judgmental over steering operations. (c)

INSTRUCTIONS FOR TABLE #2: Provide estimated costs for upgraded taxi routes under the column entitled "Upgrade Primary Route." For those items listed that satisfy DG VI standards, please state "Meets Stds." Provide estimated costs for a new taxi route under the column entitled "New DG VI Taxiway Route." Costs item for similar design features, that is, all straight taxiway sections, all taxiway intersections, etc., should be grouped together. For estimated costs for items not listed in table #2, use the row entry entitled "Other."

TABLE #2

ESTIMATED UPGRADE/NEW COSTS: TAXIWAY ROUTE(S) IN HUNDRED-THOUSAND DOLLAR UNITS			
DESIGN FEATURE		UPGRADE EXISTING TAXIWAY ROUTE	NEW DG VI TAXIWAY ROUTE
RUNWAY/ TAXIWAY EXITS Include number of exits. Include all exits as a single cost item.	1. FILLETS		
	2. LIGHTS AND/OR SIGNS Relocated, new.		
STRAIGHT TAXIWAY SECTIONS Include number of straight sections. Include all costs for straight sections as a single costs item.	PAVED WIDTH Std = 100 feet		
	SHOULDER WIDTH Std = 40 feet		

RUNWAY/ TAXIWAY EXITS Include number of exits. Include all exits as a single cost item.	1. FILLETS		
	TAXIWAY SAFETY AREA (TSA) WIDTH. Grading, clearing, etc. Std width = 262 feet (full width)		
	TAXIWAY OBJECT FREE AREA (OFA) WIDTH. Grading, clearing, etc. Std = 386 feet.		
	LIGHTS AND/OR SIGNS. Relocated, new.		
INTERSECTING TAXIWAYS Include number of intersections. Include all costs for intersections as a single cost item.	1. FILLETS		

RUNWAY/ TAXIWAY EXITS Include number of exits. Include all exits as a single cost item.	1. FILLETS		
	LIGHTS AND/OR SIGNS Relocated, new.		
OTHER			
List type of cost separately.			

IV. TAXIWAY/RUNWAY BRIDGE/CULVERTS. Upgrade the load bearing capacity and width of any bridge or culvert traversed by the NLA.

ASSUMPTIONS/INFORMATION: Assume (a) the maximum taxiing operating weight for NLA equals 1.4 million pounds and (b) the width of safety areas meet the relevant DG VI standards for (I) combination runway plus parallel taxiway, (ii) runway with no parallel taxiway, and (iii) single taxiway.

INSTRUCTIONS TABLE #3: Provide the estimated costs in table #3 to upgrade any or all of the above items. For runways and taxiways not traversing any bridge/culvert or for those items already satisfying the assumptions, please state "None Required" or "Meets Stds." For estimated costs items not listed, such as, relocation costs for signs, lights, etc., list their total cost separately under the row entry entitled "Other."

TABLE #3

ESTIMATED UPGRADE COSTS: RUNWAY/TAXIWAY BRIDGE AND/OR CULVERTS IN HUNDRED-THOUSAND DOLLAR UNITS			
DESIGN FEATURE	RUNWAY/PARALLEL TAXIWAY COMBINATION	RUNWAY WITHOUT PARALLEL TAXIWAY	TAXIWAY (Away from runway environment)
BRIDGE(S)			
CULVERT(S)			
OTHER List type of cost.			
OTHER List type of cost.			

V. TERMINAL/APRON IMPROVEMENTS. Select either (a) 2 NLA simultaneous operations or (b) more than 2 NLA simultaneous operations (state number) to provide the estimated costs for improvements to enplaning/deplaning facilities. Provide separate estimates for enplaning/deplaning facilities if international arrival facilities are NOT used for enplaning passengers. Estimated costs generally fall in two areas (a) aprons (strength, clearances, relocating taxilane/taxiways (if required), relocating fuel hydrants, etc.) and (b) terminals (larger departure lounges, additional bridges, relocation of adjacent gate positions, etc.)

ASSUMPTIONS/INFORMATION: Assume NLA will carry 500-800 passengers with the possibility to board/deplane passengers from (a) the main and upper decks and (b) forward and aft sections. Two cases for the number of NLA operations are offered to address market differences. Airports NOT expecting numerous NLA operations should use 2 NLAs for their estimated costs. Airports expecting a continued steady growth in the number of NLA operations should use a number that best fits their situation (please state the assumed number).

INSTRUCTIONS FOR TABLES #4: Provide the estimated costs in table #4. The table allows the airport authorities to report their estimated costs for either a single arrival/departure location (e.g., an international terminal used for both enplaning and deplaning) or for multiple arrival/departure locations (e.g., multiple dominant carrier operations).

TABLE #4

ESTIMATED UPGRADE COSTS: TERMINAL/APRON IN HUNDRED-THOUSAND DOLLAR UNIT			
	MAIN INTERNATIONAL TERMINAL (single facility for enplaning & deplaning)	SEPARATE CARRIER FACILITY TERMINAL #A	SEPARATE CARRIER FACILITY TERMINAL #B
AIRCRAFT PARKING POSITION STRENGTH UPGRADE			
APRON EXTENSION, For example, clearances, relocating existing taxi routes.			
AIRCRAFT GROUND SERVICING For example, fuel hydrants. List types separately.			

PASSENGER LOADING BRIDGES			
GATE AND HOLDING AREAS			
CUSTOM/ IMMIGRATION; AND WAITING AREA			
BAGGAGE PROCESSING AND CAROUSELS			
OTHER List type of cost.			
OTHER List type of cost.			

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