## Engineering Brief # 16

Date: May 24, 1977

In Reply Refer To: AAP-580

Subject: Engineering Brief No. 16, Cost Plus Fixed Payment

Contracts for Engineering Services

From: Chief, Airports Engineering Division, AAP-500

To: All Regions

Attn: Chiefs, Airports Divisions

Engineering Brief No. 16, Cost Plus Fixed Payment Contracts, is enclosed. It contains both consultants and AAP-500's thoughts on "Cost Plus Fixed Fee with Upset Limit" contracts. Advisory Circular 150/5100-9, Engineering Services Under ADAP, does not address the upset limit concept. Any comments received will be considered in the forthcoming revision of this document.

ORIGINAL SIGNED BY: LEONARD E. MUDD

Enclosure

ENGINEERING BRIEF No. 16

COST PLUS FIXED PAYMENT CONTRACTS FOR ENGINEERING SERVICES UNDER ADAP

Background.

The terms Cost Plus Fixed Payment and Cost Plus Fixed Fee are used interchangeably in practice and in this Engineering Brief. Guidance to sponsors on the various types of contracts permissible for engineering ices under the Airport Development Aid Program is contained in Advisory Circular 150/5100-9, Engineering Services Under ADAP. They include the following:

- 1. Per Diem
- 2. Lump Sum
- 3. Cost Plus a Fixed Payment

Recently AAP-500 has received feedback from consultant engineers concerning the performance of basic services under a Cost Plus Fixed Fee with Upset Limit contract. It was pointed out that working under such a concept is unfair to the engineer. In theory, the fixed fee guarantees a "reasonable profit", however, in the event of project delays, problems, or changes which increase costs, the "reasonable profit" is not assured and in some cases may be entirely wiped out. This statement implies that the engineer will be required to complete a project with no additional compensation if costs exceed the upset limit.

AAP-500 Interpretation of "Upset Limits"

It is our understanding that Cost Plus Fixed Fee contracts are frequently used for projects where the cost and scope of work cannot be accurately determined at the time an agreement is being negotiated. Such contracts provide for reimbursement of all allowable costs plus a fee to cover profit. The fee is fixed and does not vary no matter what the costs turn out to be. In most instances, however, a ceiling or "upset limit" is applied which establishes an upper limit on the allowable costs. The intent of the upset limit is to insure that Cost Plus Fixed Fee contracts are not "open ended"; that is, allowable costs do not exceed an agreed upon ceiling without prior approval of the sponsor and FAA.

Such agreements should provide for renegotiation of the fixed payment and the upset limit in the event the scope of work or the allowable costs are increased over that contemplated during the original negotiations. Any increase in costs must be fully justified by the consultant prior to approval by the sponsor and FAA.

Your comments on the thoughts expressed in this engineering brief will be appreciated.

ORIGINAL SIGNED BY: RICHARD J. WORCH Civil Engineer