

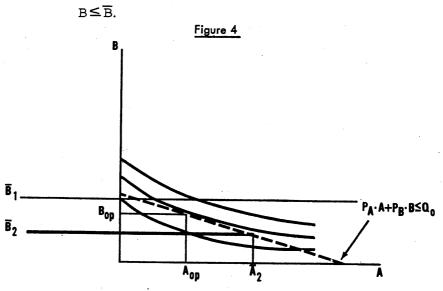
Given Q, we now maximize our productivity by hiring  $A = A_{op}$ ,  $B = B_{op}$ , since at this point the budget line reaches—and is tangent to—the highest isoproductivity curve. This method vitally depends on the convex nature of the isoproductivity curves.

## 3.1 Effect of Limitation on Number of GS-14s+(B)

Let us state the constraint imposed by a limitation on the number of GS-14s+ in the following manner:

 $\overline{B}$  = maximum allowable number of GS-14s+;

thus,



When  $\overline{B} = \overline{B}_1 > B_{op}$ , the constraint is irrelevant, because, given  $Q = Q_o$ , the optimum mix is  $A_{op}$ ,  $B_{op}$ , with effectiveness (productivity) equal to  $E(A_{op}, B_{op})$ .