

4) At or before 1,500' AFL, retract flaps (if possible) and set power at a specified SPR or RPM so as to climb to 3,000' AFL, not exceeding 200 K IAS and 1000 fpm sustained rate of climb. If ATC requires a level-off prior to reaching 3,000' AFL, no power change is required.

5) Above 3,000' AFL, normal climb schedule.

b. Close-in procedure*

1) Accelerate at $V_2 + 25$ K IAS.

2) After crossing airport boundary and after reaching 300' AFL reduce to a specified EPR or RPM that will maintain $V_2 + 25$ K IAS and a sustained 1,000 fpm rate-of-climb at a maximum deck angle of 15°.

3) Flight path outbound from take-off shall not require any turn below 300' AFL and not more than a 15° bank.

4) At or before 1,500' AFL, retract flaps (if possible), and set power at a specified EPR or RPM so as to climb to 3,000' AFL not exceeding 200 K IAS and 1,000 fpm rate-of-climb. If ATC requires a level-off prior to reaching 3,000' AFL, no power change is required and IAS may be allowed to increase.

5) Above 3,000' AFL, normal climb schedule.

2. Approach and Landing Procedures

a. VFR

1) Inbound flight path will not require more than a 20° bank to follow noise abatement track.

2) Initial inbound altitude for noise abatement areas will be a descending path from 3,000' AFL (reference: Paragraph F. 3, above).

3) IAS will be reduced to a maximum of 200 K at 1,500' AFL.

4) Downwind and base leg, or straight-in approach, shall be at a maximum IAS of 160 K, with not more than take-off flap (or approach flap, if applicable).

5) A 6° Glideslope is recommended for use to within 2 miles of the runway threshold, and a 3° Glideslope from the 2 mile point to the threshold.

6) After passing one mile mark inbound from threshold, full flap may be used.

b. IFR

1) Inbound flight path will not require more than a 20° bank to follow noise abatement track.

2) IAS and altitudes as directed by Approach Control, but not to exceed 250 K IAS or less than $V_{1.4}$ at take-off (or approach, if applicable) flap.

3) Maximum of take-off (or approach, if applicable) flap to the outer marker with landing flap delayed until required.

4) Further development of a 6° Glideslope to within three miles of the runway threshold, followed by a 3° Glideslope for the final three miles is encouraged.

Mr. FRIEDEL. Mr. Woods, you mentioned four points, one being flight procedures. Can you elaborate a little bit on what you mean by flight procedures or how they could be of benefit in abatement of noise?

Mr. Woods. Yes, sir; we feel that the research done by FAA with some airline assistance, I think largely at Wallops Island, developing the two segment departure procedures very appropriate in many areas.

We have developed an additional procedure because we use many airports that are close in which calls for a power reduction sooner than the Wallops Island procedure which is now in effect at Washington National Airport. We believe that this kind of a departure procedure can bring a certain amount of noise reduction.

In the arrival we feel that this is a little more complex and many of the benefits await breakthroughs in the state of the art such as a two segment or steeper profile relatively close to the airport.

We believe that these are things that particularly the larger aircraft cannot do. We are hopeful that this may later be possible. We feel that we have achieved, with the Federal Aviation Agency, certain new concepts in traffic control procedures, particularly the radar vectoring program in the vicinity of airports that hold aircraft to a higher altitude for a longer period of time than was true in the past.

*For communities less than 10,000' from brake release point.