Activity Assumptions
• 300,000 Total Annual Aircraft Operations
• 90,000 Helicopter Operations Included
• No 1970s Era Business Jets

Projected Noise Contours with Helicopter Flight Training
Buchanan Field Airport
Activity Assumptions
- 320,000 Total Annual Aircraft Operations
- 90,000 Helicopter Operations Included
- No 1970s Era Business Jets
- 20,000 Regional Airline Jet Operations Included

Typical Helicopter Touch & Go Flight Tracks
Typical Airplane Flight Tracks

55-60 dBCNEL
60-65 dBCNEL
65-70 dBCNEL
70+ dBCNEL

Background Data: Buchanan Field Airport / Chapter 5

Projected Noise Contours with Limited Airline Service
Buchanan Field Airport
Note: The contours represent the momentary maximum sound level experienced on the ground as the helicopter flies over.

Helicopter Flight Training Noise Footprint
Runway 19 Direction
Buchanan Field Airport
Landing Spot

Note: The contours represent the momentary maximum sound level experienced on the ground as the helicopter flies over.

Exhibit 5K

Helicopter Flight Training Noise Footprint
Runway 32 Direction
Buchanan Field Airport
Operational Measures

- **Pattern Altitude** — Maintain pattern altitude of 1,000 feet above ground level for single-engine aircraft and 1,500 feet above ground level for twin-engine aircraft and jet aircraft.
  Status: In effect.

- ** Preferential Runways** — Retain preferential use of Runway 19R for arrivals and 32R for departures; investigate also designating Runway 1L as preferential departure runway.
  Status: In effect as a voluntary measure.

- **Noise Abatement Departures** — Departing aircraft should climb as rapidly as practical and avoid turns at low altitudes.
  Status: In effect as a voluntary measure.

- **Touch-and-Go Hours** — Prohibit touch-and-goes between 10:00 p.m. and 7:00 a.m. weekdays and prior to 8:00 a.m. on weekends and holidays.
  Status: In effect.

- ** Intersection Departures** — Prohibit intersection departures.
  Status: In effect.

- **Air Traffic Control** — Air traffic control personnel requested to advise pilots of noise abatement considerations and admonish pilots who deviate from standard procedures.
  Status: Not directly implemented; information provided to pilots in other ways.

- **Visual Approach Slope Equipment** — Install equipment at each runway end to assist pilots in maintaining appropriate approach path.
  Status: Approach slope guidance equipment exists on runways where it is most beneficial to safety and noise abatement (1L, 19R, and 32R); no apparent noise benefit to installation at other runway ends.

- **Helicopter Operations** — Define arrival, departure, and flight training routes for helicopters.
  Status: In effect as a voluntary measure.

Management and Financial Policies

- **Informational Signs** — Maintain airfield signs advising pilots of noise abatement procedures.
  Status: In place; recently added more signs.

- **Publish Noise Abatement Advisories** — Continue to distribute noise abatement information through pilots guides, flight instructors, etc.
  Status: In effect.

- **Noise Abatement Compliance** — Pilots to be advised in writing of violations to noise abatement policies.
  Status: In effect.

- **Flight Training** — Flight schools should continue to include noise abatement techniques in their curricula.
  Status: In effect.

- **Reliever Airport** — Develop reliever airport in east county.
  Status: Byron Airport opened in 1994.

- **Noise Monitoring Equipment** — Purchase new portable noise monitoring equipment.

- **Limit Based Aircraft Capacity** — Avoid construction of facilities to expand based aircraft capacity beyond level approved by Board of Supervisors.
  Status: Approved airport plan limits based aircraft capacity to approximately 850 versus 650 existing spaces and 890 current based aircraft.

- **Lease Agreements** — Include noise abatement compliance requirements in airport leases.
  Status: Not implemented.

- **Interagency Coordination Procedures** — With Airport Advisory Committee (AAC) as focus, county should continue to take lead in formulating an ongoing working relationship with local and regional planning agencies.
  Status: In effect.

- **Maintain Public Information Program** — Through AAC forum, county should continue to present information to public regarding noise abatement program implementation and to solicit public input on issues.
  Status: In effect.

- **FAR Part 36 Compliance** — FAA should adopt more stringent nationwide aircraft noise standards.
  Status: Not within county authority to implement.

Status of FAR Part 150 Noise Abatement Measures
Buchanan Field Airport

Contra Costa County Airport Land Use Compatibility Plan (December 2000) 5-19
Management and Financial Policies, Continued

➢ Noise Management System — Install system of permanent noise monitors and equipment to record noise data.

➢ Noise Abatement Officer — Create position of Airport Community Relations and Noise Control Officer.
  Status: Created in 1990, then subsequently eliminated; recently reinstated by current airport management.

➢ Airport Noise Ordinance — Adopt ordinance prohibiting noisier classes of aircraft from using the airport.

➢ Airline Activity — Limit the number of airline flights at airport.
  Status: Policy implemented by means of 1992 access plan; currently no airline service at airport.

➢ Limit Noise to Current Levels — Growth in airport activity should not be accommodated if the resulting noise levels would create new incompatible land uses.
  Status: Not implemented as policy, but current and projected future noise contours are smaller than ones existing at time of Part 160 study.

➢ Late Night and Early Morning Operations — Place restrictions or special fees on airline operations occurring between 10:00 p.m. and 7:00 a.m.
  Status: Not implemented as policy; currently no airline service at airport.

➢ Noise Abatement Information — Publish and distribute noise abatement information to all airport users.
  Status: In effect.

➢ Airport Rules and Regulations — Noise abatement policies should become part of airport rules and regulations.
  Status: In effect since 1987.

➢ Periodic Noise Modeling — Current airport noise contours should be updated on a regular basis in order to monitor changes in airport noise impacts.
  Status: In effect; new noise contours for existing and future airport activity have been prepared as part of the airport land use planning study.

Source: Buchanan Field Airport Management (April 2000)
Notes:
• Each dot represents a location from which one or more complaints were received on the Buchanan Field Airport noise complaint line during the period from 1989 through 1999.
• The airport influence area boundary depicted on this map is approximate. See Figure 3A for official location.

Source: Buchanan Field Airport Management (April 2000)
AIRPORT ENVIRONS

The environs of Buchanan Field Airport can be characterized as intensively urbanized. This characteristic is a significant factor with regard to airport land use compatibility planning in that the Contra Costa County Airport Land Use Commission has no authority over existing land uses. The commission’s role is limited to influencing future development. The potential for redevelopment, particularly with regard to nonresidential land uses, thus represents the primary compatibility planning concern.

A brief description of existing and planned land uses in the Buchanan Field Airport vicinity is presented in Exhibit 5N. Exhibit 5O depicts, in simplified form, the land use designations which each of the surrounding communities has adopted for locations around the airport. In most cases, these designations reflect existing development.
### AIRPORT LOCATION AND NEARBY TOPOGRAPHY
- **Location**
  - North-central Contra Costa County; 4 miles south of Suisun Bay
  - Situated in unincorporated area between cities of Concord, Martinez, and Pleasant Hill
- **Topography**
  - Airport site on flat valley floor, adjacent to Walnut Creek channel
  - Airport Elevation: 23 feet above sea level
  - Hills 5 miles west, maximum elevation 1,000± ft.
  - Mount Diablo, 10 miles southeast, elev. 3,849 ft.

### EXISTING AIRPORT AREA LAND USES
- **General Character**
  - Intensively urbanized in all directions except north
- **Runway Approaches**
  - Southwest (Rwys 1R/L): golf course at runway end; Interstate 680 (0.3 miles); shopping centers beyond freeway; Diablo Valley College (0.8 miles)
  - Northwest (Rwys 14R/L): State Rte. 4 freeway (700 ft. beyond runway end); open fields; wastewater treatment plant; Walnut Creek channel; oil refinery
  - Northeast (Rwys 19L/R): Walnut Creek channel (at runway end); residential to east; mixed commercial and light industrial along flight path
  - Southeast (Rwys 32 R/L): Walnut Creek channel at runway end; mixed commercial and light industrial
- **Traffic Patterns**
  - East: mixed uses including residential
  - West: mostly residential except commercial along Pacheco Blvd.

### COMMUNITY LAND USE PLANNING
- **County of Contra Costa**
  - **Area of Land Use Jurisdiction**
    - Unincorporated area includes airport, bayside lands to north, and community of Pacheco to west
  - **Adopted Community Plans**
    - Contra Costa County General Plan, 1995-2010 — Adopted July 1996
  - **Planned Airport Area Land Uses**
    - Continuation and infill of existing land use pattern
  - **Established Airport Compatibility Measures**
    - General Plan policy is to "work with adjacent cities to ensure that Buchanan Field Airport environments are developed and redeveloped in ways which protect public safety and maintain the viability of the airport"
    - Height limit zoning adopted [outdated]

- **City of Concord**
  - **Area of Land Use Jurisdiction**
    - Lands south, southeast, and east of airport
  - **Adopted Community Plans**
    - Concord General Plan — Adopted July 1994; various later amendments
  - **Planned Airport Area Land Uses**
    - Mostly continuation of current development pattern
    - Potential for increased intensity of commercial and office uses in core areas
  - **Established Airport Compatibility Measures**
    - Stated goal of general plan is to both revitalize development potential of central Concord and maintain viability of Buchanan Field Airport
    - Structural heights limited in accordance with ALUC criteria and special TERPS airspace studies
    - Safety zones of 1984 ALUC plan adopted
    - Residential uses normally acceptable up to 55 Ldn

- **City of Martinez**
  - **Area of Land Use Jurisdiction**
    - Eastern part of city extends to within 1 mile west of airport (west of Pacheco)
  - **Adopted Community Plans**
    - Martinez General Plan — Adopted 1973; numerous subsequent amendments
    - Land use map dated February 1995 reflects John Muir Parkway and Hidden Lakes specific area plans which lie within airport influence area
  - **Planned Airport Area Land Uses**
    - Mostly continuation of existing development
  - **Established Airport Compatibility Measures**
    - No explicit reference to airport in city plans

- **City of Pleasant Hill**
  - **Area of Land Use Jurisdiction**
    - Lands southwest of airport
  - **Adopted Community Plans**
    - Pleasant Hill General Plan — Adopted Nov. 1990; various later amendments
  - **Planned Airport Area Land Uses**
    - Mostly continuation of current development pattern
    - Potential for more intense commercial/office uses along Contra Costa Blvd. (max. FAR 0.35 to 0.4)
  - **Established Airport Compatibility Measures**
    - General plan safety element policy is to increase safety of city residents by cooperating with ALUC
    - City utilizes 1984 ALUC safety zone
    - Residential uses normally acceptable up to 55 Ldn

Source: Data Compiled by Shutt Moen Associates (April 2000)
Simplified General Plan Land Use Designations

Buchanan Field Environ