

provided leadership in the land use area by commissioning a study in the early 1980s which, in turn, used information gathered by the Institute of Transportation Studies at the University of California-Berkeley. That study and others have created the basis of a number of publications in Colorado, Florida, New Jersey, North Dakota, Oregon, Washington state, and elsewhere. Some were completed as a result of statutory "mandate," some on a "courtesy" basis.

Consultant queried *every* state agency in the country as part of the research for this Report to determine whether those agencies: 1) provided an airport land use compatibility guide or handbook; 2) knew of specific strategies that local governments used in their state to manage incompatibilities; and, 3) provided advice to local governments as to how to manage existing incompatibilities. Of the 50 states, 25 agencies responded to the requests for information. A summary of the responses is in Appendix 2. Most state agencies do not provide printing airport compatibility land use materials; some provide copies of sample ordinances or other legal materials, and few give much advice to local governments except to refer them to federal regulations.

#### **IV. Maryland Aviation Administration**

The Maryland Aviation Administration ("MAA") is a sub-agency of the State Department of Transportation acting under statutory authority. Its duties are set forth in the statute and essentially comprise the following:

- 1) Promotion and regulation of aviation within the state;
- 2) Licensing of private airports;
- 3) Providing advice and assistance to local governments on aviation matters.

MAA has responded to several questions posed of it by the M-NCPPC in the past while the Potomac Airfield study of 1999 was in preparation. MAA lacks manpower and funding to be as effective as some state aviation agencies. It does license private airports, conduct limited air traffic counts, and keep records on aircraft accidents and other pertinent data. It has not been as strict as FAA in discretionary matters, and has granted waivers on runway width, for example, which would not have met FAA standards had the airports been federally funded.

MAA stated in a letter to Consultant that it had advised Prince George's County concerning airport safety issues, but that it was "frustrated" that some of the advice had not been followed.

#### **V. Prince George's County and the Maryland-National Capital Park and Planning Commission**

The M-NCPPC, the planning and zoning authority for Prince George's County is in the unusual role of being an airport owner/operator as well and as such, should be intimately involved with aviation issues. M-NCPPC is not only the owner of one of the airports involved in this Report—College Park—but it also owns land adjacent to that airport, and also is the owner of land adjacent to Potomac Airfield. Potomac Airfield is bounded by trees on the east side of Runway 24 on land owned by the M-NCPPC. At College Park, three sides of the airport have tall trees on land owned by the M-NCPPC. So, in its role as airport owner, it may have responsibilities beyond that of being a planning and zoning authority. In the discussion later recommendations are made

recommendations are made to the Commission concerning some tree-cutting or trimming at two of the airports in the County (Potomac and College Park), and needed fencing at the airport it owns, College Park.

## **VI. Fundamentals of General Aviation Aircraft and Airport Operations**

### **A. Flight Primer**

Small general aviation aircraft make up the majority of all airborne machines. They are flown by pilots of varying experience, skills, and knowledge. The aircraft carry a wide range of instruments to assist the pilot, and the aircraft vary in size, age, condition and flight characteristics. All of these variables, and many others, affect the safety of flight and consequently, the safety of persons and property in the aircraft or on the ground. While it is true that aircraft accidents can happen anywhere, statistics show the reasons why there is a high incidence of accidents in the vicinity of airports:

- 1) aircraft flights near airports occur in close proximity to the ground, which means that mistakes of the pilot or aircraft failure gives little opportunity for recovery before the airplane is vulnerable to impact with the ground or protruding structures, trees, or other impediments;
- 2) several aircraft are frequently in the air at the same time near an airport creating the potential for mid-air collisions between aircraft;
- 3) aircraft frequently undertake to land or take-off in less than optimal meteorological conditions;
- 4) air traffic control towers are not found at most general aviation airports, meaning that pilots are "on their own" with respect to the rules of the road and must operate in a "see-or-be-seen" environment;
- 5) there are limited navigational aids or manned communications stations at most small airports;
- 6) many small airports have flight schools that encourage novice aviators to learn to fly; lack of piloting experience is often a contributing factor in aircraft accidents;

## **B. Airport Operations (VFR, IFR), Precision vs. Non-Precision Approaches**

Airports provide a wide range of navigational aids, including equipment which helps aviators to land in weather conditions which might obscure the runway from view at higher altitudes. "VFR" means that a flight is being operated by the pilot under Visual Flight Rules. The pilot must use his/her own vision to help navigate his craft. "IFR" means the pilot is operating under conditions in which he/she must depend on aircraft instruments to assist in flying the plane and directing its route of flight.

A precision approach allows an aircraft to use an electronic glide slope during the landing phase; a non-precision approach does not use an electronic glide slope. The airports under study for this Report either allow *only* VFR approaches, or, in a few cases, allow non-precision approaches to different runways.

## **C. Air Controllers and "See-and-Be-Seen" (Uncontrolled) Airports, Including Communication Issues, with Specific Reference to Prince George's County Airports**

When meteorological conditions permit, regardless of the type of flight plan or whether the aircraft is under control of a radar facility, the pilot is responsible to see and avoid other traffic, terrain or obstacles. FAR Part 91 right-of-way rules require pilots operating under Visual Flight Rules ("VFR") or Instrument Flight Rules ("IFR") to see and maneuver to avoid other aircraft when weather conditions permit. Judgment aspects of collision avoidance are published in the Airmen's Information Manual ("AIM"). Aircraft under the control of and communicating with an Air Traffic Control ("ATC") facility are required to follow directions of the controller to avoid other known aircraft.

In the case of Prince George's County, the ATC facilities involved are Washington Approach Control, Reagan Washington-National Tower, and Andrews AFB Tower. The controller of an ATC facility provides radar traffic information to radar-identified aircraft operating outside of positive controlled airspace on a workload-permitting basis and issues safety alerts to aircraft under its control if aware that the aircraft is at an altitude believed to place the aircraft in an unsafe proximity to terrain, obstructions, or other aircraft.

Pilots of aircraft operating at or near an "uncontrolled" airport (no tower) are responsible to maintain separation from other aircraft. The four Prince George's County airports under study are "uncontrolled" airfields. This means a reduced level of safety in the view of most aviators. Two of the airports, Washington Executive/Hyde Field and Potomac Airfield have shared unicoms. The other two airports, College Park and Freeway Airports, have individual unicoms, that is, non-government operated radio communication facilities that *may* provide airport information. Pilots are expected to report their operating intentions and/or position location while near or in the traffic pattern of these airports, but they are not required to do so by any regulation. It is a voluntary action by the pilots, recommended by FAA.

The shared unicom between Washington Executive/Hyde Field and Potomac Airfield is an automated unicom, with an assigned VHF frequency of 122.8. A pilot may tune into that frequency, report information, and receive an automatic read-back of information. In addition,

there is an "open microphone" created for all other pilots who might be monitoring the same frequency—another safety margin so pilots in the area will learn the intentions of others.

Aircraft are equipped with a transponder, a device that emits a signal with a code identifying the aircraft itself. It should be activated anytime the aircraft is aloft. Pilots should be aware that the proper application of transponder procedures provides aircraft operating either under IFR or VFR rules with a higher degree of safety, since ATC will be aware of the transponder signal and be in a position to determine where the aircraft is in relation to others, particularly in areas where there are high-speed closure rates from various jet aircraft, both civilian and military, such as the Washington area. Even an aircraft that is not in contact with ATC is assisted by the transponder, since ATC will be able to communicate traffic advisories to other aircraft as to the location of the aircraft. None of this, of course, relieves the pilot from doing visual scans for other aircraft.

General aviation aircraft operating in VFR conditions from the airfields which are the focus of this study will not normally be in contact with ATC because they are operating in airspace below the Class "B" airspace reserved for larger aircraft. Naturally, when small aircraft are temporarily in such airspace, they must be under the control of Washington Approach Control.

The use of aircraft exterior lights, rotating beacons, strobe lights, taxi and landing lights, and aircraft position lights can greatly increase the visibility of the aircraft by others.

#### **D. Risk Factors in Aviation Generally and Around Airports Specifically**

Assessing risk of general aviation aircraft accidents specifically is difficult due to the variety of reasons for accidents. General aviation accident risk is a function of the number of operations, the reliability of aircraft, and proficiency of pilots, along with uncontrolled factors such as weather.

Approximately half of all aircraft accidents occur within five miles of the departure or arrival airport. Note on the accompanying chart that over 64% of all general aviation accidents occurring in that six-year period were during the flight phases of take-off, approach, or landing.

U.S. General Aviation: Accidents, Fatal Accidents, Fatalities, and Rates

CHART 8

(page 2)

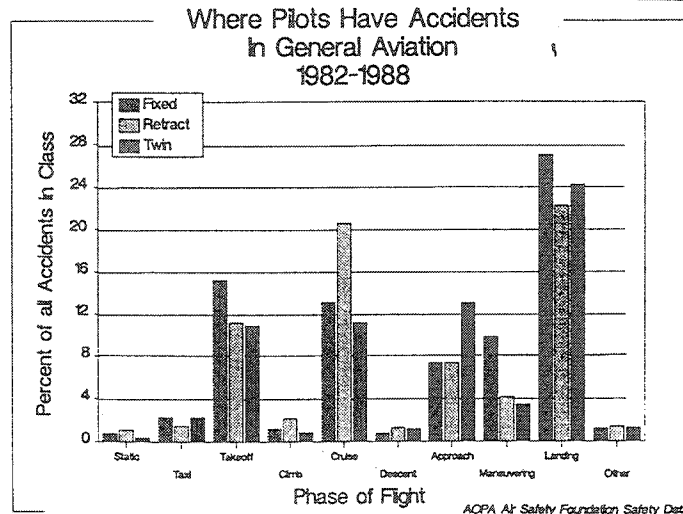
Year	Accidents			Est. Aircraft Hours Flown	Accident Rate per 100,000 Hours Flown		
	Total	Fatal	Total Fatalities		Total	Fatal	Fatalities
1975	3,995	633	1,252	28,799,000	13.87	2.20	4.35
1976	4,018	658	1,216	30,476,000	13.17	2.16	3.99
1977	4,079	661	1,276	31,578,000	12.91	2.09	4.04
1978	4,216	719	1,556	34,887,000	12.08	2.06	4.46
1979	3,818	631	1,221	38,641,000	9.88	1.63	3.16
1980	3,590	618	1,239	36,402,000	9.86	1.69	3.40
1981	3,500	654	1,282	36,803,000	9.51	1.78	3.48
1982	3,233	591	1,187	29,640,000	10.90	1.99	4.00
1983	3,077	556	1,069	28,673,000	10.73	1.94	3.73
1984	3,017	545	1,042	29,099,000	10.36	1.87	3.58
1985	2,739	498	956	28,322,000	9.66	1.75	3.38
1986	2,582	474	967	27,073,000	9.54	1.75	3.57
1987	2,495	447	838	26,972,000	9.25	1.65	3.11
1988	2,387	460	800	27,446,000	8.69	1.68	2.91
1989	2,233	431	768	27,920,000	7.98	1.53	2.75
1990	2,215	443	765	28,510,000	7.77	1.55	2.68
1991	2,176	434	794	27,226,000	7.98	1.59	2.92
1992	2,073	446	857	24,800,000	8.35	1.79	3.46
1993	2,038	398	736	22,800,000	8.93	1.74	3.23
1994	1,995	404	730	22,240,000	8.96	1.81	3.28
1995	2,055	412	734	23,930,000	8.57	1.71	3.07
1996	1,905	359	631	24,100,000	7.90	1.49	2.62
1997	1,858	356	660	25,473,000	7.29	1.40	2.59
1998	1,907	361	621	26,796,000	7.12	1.35	2.32
1999	1,908	342	628	27,080,000	7.05	1.26	2.32

Note: "substantial damage" definition modified in 1968

Note: 1999 data is preliminary

Civil Aeronautics Board data 1938--1959

General Aviation includes all operations other than those conducted under 14 CFR 121 or 14 CFR 135



## NTSB Reports of Aircraft Accidents, Fatalities, and Rates, 1982-1999

Table 10. Accidents, Fatalities, and Rates, 1982 through 1999,  
U.S. General Aviation

Year	Accidents		Fatalities		Flight Hours	Accidents per 100,000 Flight Hours	
	All	Fatal	Total	Aboard		All	Fatal
1982	3,233	591	1,187	1,170	29,640,000	10.90	1.99
1983	3,077	566	1,062	1,062	28,873,000	10.73	1.94
1984	3,017	545	1,042	1,021	29,099,000	10.36	1.87
1985	2,739	498	956	945	28,322,000	9.66	1.75
1986	2,583	475	969	881	27,073,000	9.54	1.75
1987	2,495	447	838	823	26,972,000	9.25	1.65
1988	2,385	460	800	792	27,446,000	8.69	1.68
1989	2,233	431	768	765	27,920,000	7.98	1.53
1990	2,215	443	767	762	28,510,000	7.77	1.55
1991	2,175	433	786	772	27,678,000	7.85	1.56
1992	2,073	446	857	855	24,780,000	8.36	1.80
1993	2,039	398	736	732	22,796,000	8.94	1.74
1994	1,994	403	725	718	22,235,000	8.96	1.80
1995	2,053	412	734	727	24,906,000	8.23	1.64
1996	1,908	360	632	615	24,881,000	7.67	1.45
1997	1,853	353	643	637	25,464,000	7.28	1.39
1998	1,909	365	623	617	26,796,000	7.12	1.36
1999	1,908	342	628	622	27,080,000	7.05	1.26

### Notes

1999 data are preliminary. 1998 flight hours are preliminary.

Hours are estimated by the Federal Aviation Administration.

Suicide/sabotage cases included in "Accidents" and "Fatalities" but excluded from accident rates in this table are: 1982 (3 acc., 0 fatal acc.); 1983 (1, 0); 1984 (3, 2); 1985 (3, 2); 1987 (1, 1); 1988 (1, 0); 1989 (5, 4); 1990 (1, 0); 1991 (3, 2); 1992 (1, 1); 1993 (1, 1); 1994 (2, 2); 1995 (4, 3)

Since April 1995 the NTSB has been required by law to investigate all public use accidents.

Note: Consultant originally intended to compare accident experience at the four Prince George's County airports in the study with experience throughout the country. However, since records are only kept as related to hours flown, rather than on departures, and it is difficult to estimate the relationship of hours flown to departures, figures which might be assumed for the purpose of such a comparison calculation was deemed not to sufficiently accurate or probative to be worth the effort since all the variable would be suspect.

Approximately 80% of all aircraft accidents are due to human error. The most frequent cause factors for general aviation accidents involving the pilot in command are: 1) inadequate pre-flight preparation and/or planning; 2) failure to obtain or maintain flying speed; 3) failure to see and avoid objects or obstructions; 4) mismanagement of fuel; and, 5) misjudgment of distance and speed. All of these factors are associated with aircraft arrival, approach, and departure operations at airports. This helps explain the high incidence of accidents at or near airports.

The FAA reported 1,890 general aviation aircraft accidents in 1998, a typical year. There are about 600 general aviation fatalities per year in the United States.

All of these statistics point up the critical importance of having an environment surrounding a general aviation airport which is relatively clear of structures and does not have places where numbers of people might congregate, or facilities which interfere with the pilot's need to see the runway and execute communication procedures.

The facts are:

1. A majority of aircraft accidents involve small, privately-owned general aviation aircraft of the type based at Prince George's County airports;
2. Most aircraft accidents occur within 5,000 feet (less than one mile) of an airport runway;
3. Small airports typically have a number of student and low-time, inexperienced pilots;
4. Small airports generally do not have highly sophisticated navigation aids;
5. Small airports rarely have air traffic control towers and pilots are "on their own" in the use of such airports on landing, taking-off, and other maneuvers;
6. Most small aircraft accidents occur in the landing, approach, and take-off sequences, with the pilots frequently unable to control the aircraft which will fall to earth in a predictable pattern near the airport, endangering lives and property on the ground as well as the lives of those on board the aircraft.

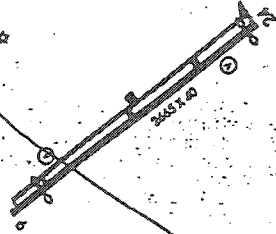
## **VII. How Are Small General Aviation Airports Managed and Controlled?**

### **A. On-Scene Management**

Airports are managed on a local basis. The few private, but publicly-used airports in the country have on-site managers who have the responsibility of determining the types business activity to be conducted on the field, the operating rules for the airport users and visitors, and policies and procedures to be used. Without the direct involvement of government, privately-owned airports are profit-oriented businesses that seek to maximize their income. In some instances, the drive for profits may put the facility in conflict with the most conservative safety

# CHART 9

**FRIENDLY—Potomac Airfield (VOK).** Location: 0 mi. NE of city. Coordinates: N38-44.85; W076-57.43. Mag var: 11W. Nav aids: ADW 113.1 240 5.6. Telephone: 202/575-5700, 301/248-5720. Fax: 301/248-3997. Hours: daylight/evenings. Elevation: 115. Pattern altitudes: 1000 MSL light aircraft; 1000 MSL multiengine aircraft; 600 MSL ultralights. Runways: 8-24 2,665 x 40, asphalt right t/c r/y 23 trees ea end, lights LIRL; SS to SR. Lights: beacon. Fees: hangar, tiedown. Approaches: GPS RNAV, VOR/DME. FSS: Leesburg 135.0, 120.3. Com freq: APP Washington/126.65; UNICOM/CTAF 122.8. Weather contacts: ATIS 113.1 301/981-4884. Charts: Washington. Noise abatement: tkof rsid aft 10 pm lcl & bfr 7 am lcl. Taxis: Yellow 301/864-7700. Rental cars: Enterprise 292-9700; Thrifty 423-2026. Lodging: Ramada Inn 4 mi 301/690-4050. Camping: on field. Local attractions: Smithsonian Museum 12 mi, Washington DC, 10 mi to Capital. Notes: 8 mi SE of Wash, DC; phone 703/557-0600 for chnc del; ultralights use left pat 24, right pat r/y 6 at 500', intensive flight training, ultralights. **Air Care One:** 301/248-4415. Hours: 24 on req. **ATC Flight Training Center:** 301/248-1480. Fax: 301/248-2950. Hours: 10 am to 6 pm weekdays; 10 am to 4 pm weekends. **Fun Flight, Inc.:** 703/751-5445, 703/768-6496. Fax: 703/768-6497. Location: CTR. Hours: 9 am to 5 pm weekdays. Computerized weather svc: Y. Frequency: 122.8.



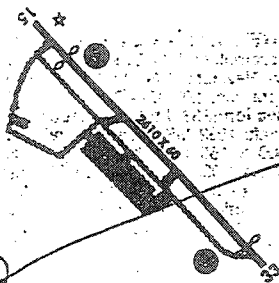
**MITCHELLVILLE—Freeway (W02).** Location: 2 mi. NW of city. Coordinates: N38-56.48; W076-46.34. Mag var: 10W. Nav aids: OTT 113.7 005 14.2. Telephone: 301/390-6424. Fax: 301/262-4967. Hours: 7 am to SS. Elevation: 168. Pattern altitudes: 1000 MSL light aircraft; 1200 MSL heavy aircraft; 500 MSL ultralights. Runways: 18-36 2,425 x 30, asphalt right t/c r/y 36 lights LIRL. Lights: beacon SS to mid night. Approaches: GPS RNAV, VOR. FSS: Leesburg 122.2. Com freq: UNICOM/CTAF 123.05. Charts: Washington; L22, L24, L28. Taxis: Bowie Cab 301/390-9091. Rental cars: Melvin 301/262-1313. Restaurants: Domino's Pizza 390-7711; Pips Country Inn 4 mi 805-5901. Lodging: Comfort Inn 301/464-0089; Ramada 459-1000; Sheraton Inn 459-6700. Local attractions: Adventure World Amusement Park 4 mi; Historic Annapolis 15 mi; Washington, DC 15 mi. Notes: intensive flight training. **Freeway Airport, Inc.:** 301/390-6424, 410/792-0380. Fax: 301/262-4967. Location: W. Fees: overnight. Hours: 8 am to dark. Computerized weather svc: Y. Frequency: 123.05. Fuel: Exxon 100LL.



Note: Information on Non-Standard approach.

**CLINTON—Washington Executive/Hyde Field (W32).** Location: 2 mi. SW of city. Coordinates: N38-44.97; W076-55.94. Mag var: 9W. Nav aids: DCA 111 152 8.2. Telephone: 301/297-7558. Fax: 301/297-7069. Hours: daylight. Elevation: 249. Pattern altitudes: 1049 MSL light aircraft; 1249 MSL turbine aircraft; 849 MSL rotorcraft. Runways: 5-23 3,000 x 60, asphalt; tree r/y 5; pwrline r/y 23, lights LIRL. Lights: beacon. Obstructions: 472' AGL tower 12 mi SE. Fees: hangar, parking, tiedown. FSS: Leesburg 122.6. Com freq: UNICOM/CTAF 122.8. Weather contacts: ATIS 113.1. Charts: Washington; L22, L24, L28. Transportation: limousine. Taxis: Blue Bird 864-7700. Rental cars: Enterprise 868-8881. Lodging: Colony South Hotel 4 mi 856-4500/free trans. Local attractions: Paul E Garbor Museum 5 mi; Washington, DC 8 mi. Notes: Aircraft parked along cld r/y & twy; hel using right hand t/c pat, intensive flight training, helicopter ops, ultralights. **Beacon Flying Service:** 301/297-9440. Location: NW. Hours: 6:30 am to 9 pm winter; 6:30 am to 11 pm summer. Computerized weather svc: Y. **Blue Sky Aviation:** 301/297-4216. Location: CTR. Hours: 9 am to sunset daily. Computerized weather svc: Y. **Freedom Air:** 301/297-7556. Fax: 301/297-7069. Location: CTR. Fees: overnight. Hours: 8 am to dark. Frequency: 122.8. Fuel: Conoco 100LL, Jet.

**COLLEGE PARK—College Park (CGS).** Location: 1 mi. E of city. Coordinates: N38-58.83; W076-55.34. Mag var: 10W. Nav aids: BAL 115.1 235 16.7. Telephone: 301/864-5844, 301/864-7188. Fax: 301/277-9269. Hours: 7 am to 10 pm. Elevation: 50. Pattern altitudes: 1050 MSL all aircraft. Runways: 15-33 2,610 x 60, asphalt; railroad r/y 15; trees r/y 33, lights PCL. Lights: SS to SR, 123.0 (5 clicks in 6 sec, med intensity); beacon. Fees: parking, ramp, tiedown. Approaches: GPS RNAV, VOR/DME RNAV. FSS: Leesburg 122.6. Com freq: APP Washington/119.85; UNICOM/CTAF 123.0. Charts: Washington; L22, L24, L28. Noise abatement: in effct 24 hrs; maintain r/y cntrn 1 1/2 mi & 650' fm r/y bfr turning; no tkof 10 pm to 7 am. Transportation: Public (rail, bus, etc.). Taxis: Yellow 864-7700. Rental cars: Enterprise 345-6070; Rent-A-Wreck 301/565-3378, 301/927-6432. Restaurants on field: 94th Aero Squadron 699-9400. Lodging: Best Western 1 mi 474-2800/trans provided; Holiday Inn 2 mi 345-6700/trans provided; Parkview Inn 1 1/2 mi 441-8110/trans provided. Local attractions: College Park Airport Museum on fld; Goddard Space Flight Center 3 mi; Nation's Capitol 8 mi; National Air & Space Museum 10 mi; Paul Garber Facility of NASM 15 mi. Notes: No act ovr 8500 lbs; PPR for hel w/24 hr notice; no student pilot allowed to utilize arpt; no primary flt instruction. **College Park Airport:** 301/864-5844. Fax: 301/277-9269. Location: CTR. Hours: 7 am to 10 pm. Computerized weather svc: Y. Frequency: 123.0. Fuel: Air BP 100LL. **College Park Avionics, Inc.:** 301/927-0505. Location: NW. Hours: 8:30 am to 5:30 pm weekdays.



Note: Information on Noise Abatement.



practices. Generally, private airport ownerships do not own or control land use around the airport, except in cases where industrial or residential airparks are part of an overall development plan.

It should be noted that most aircraft owner-pilots will conform to operating rules of the airport where their aircraft is based or housed, and further, various published directories of information concerning airfields are observed by the transient pilots as well. On the next page is a clipping from the Aircraft Owners and Pilots Association (AOPA) directory concerning the four Prince George's County airports, together with relevant information. This is but an example of the commercial publications that provide this type of information. There is also a government publication that accomplishes the same thing.

## **B. Influence and Involvement of Regulatory Agencies on Airport Management**

The FAA, and in the case of Maryland, the MAA, both exercise some control over airport management. Generally, county or city governments which do not own the airport involved are not in a position, except by "friendly persuasion" to influence airport operations. Significantly, the issues of hours of operation, services available at the airports, even operating rules, are largely at the discretion of the airport management without interference from outside agencies. The local government can suggest, on behalf of airport neighbors, that some constraints on airport operations would be desirable in controlling noise and other annoyance. Such suggestions might involve hours of operation, flight patterns to and from the airport, and similar matters. In some cases, airport operating procedures affect safety as well as make airports better neighbors.

Prince George's County should be aware of a Frederick (Maryland) County case, *Faux-Burhans v. County Commissioners of Frederick County*, more fully described in another section, which strongly suggests that the County can create an ordinance which can establish operating rules at privately-owned airports if "friendly persuasion" doesn't work.

The County is fortunate to own an historic airport at College Park that appears to be well managed. The operating rules of the airport have been carefully crafted, are widely disseminated and followed, and can be a model for other airports to follow. See Appendix for excerpts from the operating manual.

## **VIII. Typical Airport and Local Land Use Planning Processes**

### **A. Airport Plan**

Most airports will have an Airport plan, and in fact, if they receive federal funds for construction or operation of the field, an airport plan must be prepared as part of the application process. By comparison, small private airports may only have a general idea of advance planning. They may be required, however, as they are in Maryland, to obtain an operating permit from a state agency such as the MAA, in addition to meeting certain FAA requirements irrespective of ownership, based on safety-of-flight issues.

## **B. Master Plan or Comprehensive Use Plan**

A community or local government authority will typically have a Master Plan for the development of the areas under its jurisdiction. In some cases, airports exist before the Master Plan is conceived, which can result in the airport being a "non-conforming" use, and therefore, "grand-fathered" into the plan as it sits. This can create some problems, but appropriate recognition by the planning authority of some of the principles in this Report can serve to help prevent glaring airport-area land use incompatibilities in the future. Naturally, this assumes that the planners and ultimately the final authority—the City, Town or County Council—will follow the recommendation in the Master Plan. Situations around the country suggest otherwise. It appears that when pressure builds for residential or commercial development space, that often the realities of airport incompatibility give way to economic forces and developer influences.

Comprehensive Land Use Plans are likely to contain provisions for one or more airports, although typically, few plans have accurately forecast the growth of air traffic, airports and the environs. The use plan sets the tone for specific area planning and zoning, and if followed, the plan can be helpful in establishing guidelines for airport compatibility as well as all the myriad of concerns it must address. Planners may not recognize some of the issues around airports until "spot" decisions have compromised the situation. Aviation people need to be consulted well before problems assert themselves, if possible.

## **C. Airport Noise and Safety Compatibility Planning**

Airport land use planning should provide for the protection of the public health, safety and welfare through the adoption of land-use standards that aid in minimizing the public's exposure to air safety hazards and unwanted noise and annoyance generated by nearby airports. This is "easier said than done" except where regulatory bodies have clearly articulated a policy and followed it religiously. The help of federal and state authorities is largely limited to certain areas of concern, such as obstructions and noise. As is said elsewhere in this Report, the concerns about air safety have not been the primary focus of attention except when issues of noise have resulted in circumscribing airport environments, or where the primary Runway Protection Zones (RPZs) or other zones near airports have been purchased or controlled as a part of an overall airport plan. This has been regulated somewhat by FAA in exchange for financial assistance that can provide funding for RPZ land acquisition, if the locality seeks such help in connection with an airport-aid application.

Local governments need to be more aware of their responsibilities and take actions beyond minimum FAA or state standards. In recent years, as part of a realization that airports and air traffic were becoming an integral part of the urban and suburban scene, and, unfortunately, as a result of a number of catastrophic occurrences, planners and administrators have been paying more attention to the issue and their awareness has resulted in more aggressive programs in the land use arena.