

ORDER

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SO 7031.2A

SOUTHERN REGION

10/7/75

SUBJ: TERMINAL AREA ~~PLANNING~~ AIRPORT SURVEYS

1. PURPOSE. This order provides guidelines for the conduct of Airport Activity Surveys.
2. DISTRIBUTION. This order is distributed to branch level in the Air Traffic and Airport Divisions and Planning and Appraisal Staff; Area Offices; all Air Traffic field facilities and Airports District Offices.
3. ACTION. Potential candidates should be surveyed as requested by the Air Traffic Division, ASO-500, to document activity in support of the implementation of airport traffic control services. Regional office personnel will use all information available to them including input from field personnel in selecting airports to be surveyed.
4. CANCELLATION. SO Order 7031.2 is cancelled.
5. BACKGROUND. Airport activity surveys for non-FAA tower airports are conducted primarily to determine air traffic growth trends and the potential program impact on future establishment of airport traffic control service. Establishment of this service is costly. Tower establishment criteria is based on the annual volume of itinerant operations at any non-FAA tower airport. Thus, annual itinerant operation estimates projected by airport activity appraisers must be as realistic as possible.
6. DEFINITIONS.
 - a. OPERATION - A low approach below traffic pattern altitudes or a touch-and-go operation is to be counted as both a landing and a takeoff, i.e., two operations.
 - b. LOCAL OPERATION - As defined in Handbook 7210.3B, Facility Management.
 - c. ITINERANT OPERATION - As defined in Handbook 7210.3B, Facility Management.
 - d. ESTIMATED AIRCRAFT OPERATIONS - Projected annual activity considering local conditions prevalent during the survey and application of the appropriate monthly multiplier (See Appendix 4).

Distribution: RAT-3;RAS-3;RPL-2;MAT-2:FAT-0 (Normal)
FAS-1

Initiated By: ASO-510

- e. ACTIVE BASED CIVIL AND MILITARY AIRCRAFT LISTING - A locally devised form listing owner, type, (multi-engine, four-place and over, less than four-place), and type of business. A separate listing for military aircraft reflecting branch of service and type (multi-engine, four place and over, less than four-place). Only those aircraft that are considered to be permanently based on the airport are to be listed (See Appendix 1).
- f. DAILY OPERATIONS RECORD - A locally devised form to be used in recording aircraft operations other than scheduled air carrier. (See Appendix 2).
- g. SURVEY OPERATIONS RECAPITULATION - A tabular recapitulation of daily operations totals that occur during the survey period. Daily totals are summarized and weekly totals multiplied by the appropriate multiplier. (See Appendices 3 and 4).
- h. NARRATIVE SUMMARY - This portion of the report supplements SO Form 7031-1. It includes essential documentation and other related items such as climatic conditions, airport operational data, existing FAA services, passenger count, etc.
- i. BASE REPORT - A completed comprehensive activity report which has been fully documented. Once a base report has been fully established, documentation should not be repeated in later reports unless significant change(s) have occurred.
- j. SUPPLEMENTAL REPORTS - Periodic activity reports prepared and submitted after the base report.
- k. SURVEY SITE - An unobscured site from which all air traffic activity can be observed. Binoculars are recommended to help obtain type and registration numbers of operating aircraft.
- l. AIR CARRIER AIRPORT - An airport served by one or more certificated route air carriers, including trunk, local service, helicopter, all-cargo, and other route carriers holding Certificates of Public Convenience and Necessity issued by CAB authorizing the performance of scheduled air transportation over specified routes. In the Airway Planning Standard context, air carrier also includes operations by foreign-flag carriers, charter flights by certificated route air carriers and operations by supplemental and intra-state air carriers operating aircraft with a payload capacity of more than 7,500 pounds.

- m. COMMUTER AIRPORT - A civil airport served by one or more commuter air carriers, defined by CAB as "those operations which perform, pursuant to published schedules, at least five round trips per week between two or more points to carry mail." This includes commuter airlines that provide replacement for local service airlines at certain points on the local service routes.
 - n. GENERAL AVIATION AIRPORT - A civil airport without scheduled air carrier or commuter airline service.
7. ESTABLISHMENT CRITERIA.
- a. POTENTIAL CANDIDATES - (Surveyed as requested by the Plans and Programs Branch, ASO-510). - Airports, either Air Carrier, Commuter or General Aviation, having an annual itinerant operation count estimated to be equal to or exceed the establishment criteria as defined in ORDER 7031.2B Airways Planning Standard Number One - Terminal Air Navigation Facilities and Air Traffic Control Services (APS-1) and subsequent revisions thereto.
 - b. ACTIVE CANDIDATES - (Resurveyed at least biannually). - Surveyed airports, either Air Carrier, Commuter or General Aviation, with an annual itinerant operations count which is equal to or exceeds the establishment criteria as defined in ORDER 7031.2B and subsequent revisions thereto.
 - c. CRITERIA CANDIDATES - (Resurveyed as directed in Appendix 5) - Surveyed airports which meet or exceed the established criteria count for three consecutive FAA semi-annual counts.
8. FORMS. Survey results will be documented on SO Form 7031-1, Airport Survey Document. The original and one copy should be submitted to the Air Traffic Division, Attention: Plans and Programs Branch, ASO-510. Copies should be furnished to the appropriate Airports District Office, and Planning and Appraisal Staff by ASO-510.
9. SURVEY RESPONSIBILITY. Airports will be surveyed and reports prepared in accordance with the provisions of this order. The Air Traffic Division, ASO-500, has overall program responsibility. Responsibilities are prescribed below:
- a. Plans and Programs Branch, ASO-510 - This branch is responsible for:
 - (1) Determining those airports to be surveyed.
 - (2) Reviewing, analyzing and evaluating survey reports.

- (3) Determining the year the airport should be included in the tower establishment program and the Southern Region Aviation System Plan, if appropriate, and submitting recommendations accordingly.
 - b. Responsibility for conducting the survey will be determined after coordination with Operations Branch, ASO-540 and Military Activities Staff, ASO-502.
10. AIRPORTS TO BE SURVEYED. Airports will be surveyed as directed in Appendix 5 of this Order. Changes will be issued to update this Appendix as required.
 11. METHODOLOGY. Surveys will be conducted and reports prepared as indicated below.
 - a. Surveys. The actual survey involves numerous factors. Facilities who cannot provide survey information for the prescribed time periods should coordinate with ASO-510, (404) 526-7566. Primarily, it consists of onsite observations of all operations occurring during daylight hours for seven (7) consecutive days. (Activity reflected on the records of non-FAA towers is acceptable in some cases). Other factors to be considered are shown in (1) and (3) below.
 - (1) Based Civil and Military Aircraft. This information may be obtained from the airport manager, fixed base operators, or other appropriate sources. List only those aircraft that are airworthy. Aircraft that are temporarily based, such as crop dusters, should be listed and identified separately. (See Appendix 1).
 - (2) Recording Operations. Each operation, excluding regularly scheduled air carrier, that occurs in daylight hours during the survey period will be recorded. Air carrier operations should be obtained from current airline schedules with due consideration given to approved or contemplated schedule changes. Operations occurring during off-duty periods should be obtained from the local FSS, fixed base operator or other sources, if available. Otherwise, they may be estimated. (See Appendix 2).
 - (3) Recording Passengers Served. Actual passenger count should be obtained when possible and included as part of the narrative summary. Use the formula provided on SO Form 7031-1 for off-duty periods, if local sources cannot provide this information. Do not use estimated data, as this information will be used to measure the validity of such data. The Plans and Programs Branch, ASO-510, will analyze and project the data as required by the Washington Headquarters and enter it in Block 8 of SO Form 7031-1.

- (4) Obtaining Documentary Information. Other factors that could conceivably affect future activity are: the economic climate related to such items as population trends, industrial growth, employment rate and earnings per capita; contemplated changes in airline schedules or equipment; changes in airspace accessibility; aircraft sales; fixed base operator activities; aviation gas and oil sales; airport improvements of any nature; operation of non-FAA towers by city, county or state governments; establishment or increases in activity of flight schools; construction or closing down of airports in neighboring communities; military activity, etc. The Bureau of the Census, local Chamber of Commerce, State Employment Offices, military activities, airport authorities, fixed base operators, flight service stations and other organizations should be contacted to obtain essential information. Such information should be evaluated and, as appropriate, included in the narrative portion of the report under proper headings.
- b. Airport Survey Report (RIS: SO AT 7031-1). Two types of reports are involved. They are: those fully documented which establish a report base, and those for which a report base has been previously established, i.e., supplemental reports. Both types will be prepared and submitted as indicated in Paragraph 8 of this order.
- (1) Base (Fully Documented) Report - A report supplemented to include all factors that could conceivably affect future activity. Such reports could then be considered within the definition of a fully documented base report. These reports should consist of the following elements in the order listed.
- (a) Completed SO Form 7031-1 - Appendix G.
 - (b) Narrative Summary.
 - (c) Survey Operations Recapitulation - Appendix 3.
 - (d) Based civil and military aircraft listing - Appendix 1.
 - (e) Daily Operations Record - Appendix 2.
- (2) Supplemental Reports. Annual activity estimates projected in these reports should approximate those shown in previous reports (base and supplemental) unless documentation attesting to the variations is included. Supplemental reports will include the elements listed in Paragraph 11.b.(1) above except as indicated below:
- (a) Data in 11.b.(1)(c) should be prepared but not submitted to the Regional Headquarters unless used for documentation.

- (b) Data in 11.b.(1)(d) should be prepared during the survey but submitted only if used for documentation.
 - (c) Data in 11.b.(1)(c) should be used, as previously indicated, to record operations. It is not required to be submitted with the report.
- (3) Justification of Estimates. The following items require proper justification.
- (a) Active Civil Based Aircraft. If the count of civil based aircraft differs appreciably from the last report, documentation supporting the increase or decrease must be included in the narrative.
 - (b) Estimated Air Carrier Operations. If estimated air carrier operations exceed air carrier departures (as listed in the current edition of Airport Activity Statistics of Certificated Route Air Carriers) times two by more than ten percent, documentation supporting high nonscheduled activity must be included in the narrative.
 - (c) Itinerant Military Operations. If itinerant military operations exceed 1,000, indicate military units based at the airport, or state reasons for high military activity.
12. RELEASE OF INFORMATION. When airport managers are informed of the results of short term surveys, certain factors should be considered in relating the survey period to an annual estimate. Operations for a specific survey period should not, of course, be multiplied to estimate annual activity without adjustment for seasonal influence or peaks due to unusual conditions. It is easy for a municipality to erroneously assume that a straight projection of figures for the survey period represents an annual activity estimate. In some instances, the airport management has called in the local newspapers to announce that the FAA has informed them of the results of an airport survey indicating activity at the airport is well in excess of the FAA Control Tower establishment criteria. Such appraisals of the situation could be at dramatic variance with the region's official estimates. In view of the above, do not release survey information without approval from the Plans and Programs Branch, ASO-510.
13. ADDITIONAL SURVEYS. FAA air traffic facility chiefs shall advise ASO-510 of any additional non-tower/non-FAA-tower airports which are approaching the criteria for air traffic control services as prescribed in Order 7031.2B.


LONNIE D. PARRISH
Chief, Air Traffic Division

(S A M P L E)

BASED CIVIL AIRCRAFT

<u>Owner</u>	<u>Multi-Engine</u>	<u>Four-Place and over</u>	<u>Under Four-Place</u>	<u>Type of Business</u>
Sowell Aviation, Inc.	N4317P			Fixed Base Operator
Sowell Aviation, Inc.		N8487T Skylane		Fixed Base Operator
Sowell Aviation, Inc.		N7085W Cherokee		Fixed Base Operator
Sowell Aviation, Inc.			N4892Z Colt	Fixed Base Operator
Gordon Hill, N. Florida Elec. Co.			N935T Debonair	Electrical Contractor
N. Florida Gas Co.	N2115P Apache Twin			Butane & Natural Gas Distributor
E. D. St. John		N7026P Commanche		Building Contractor
Gordon Atwater		N4949D Skylane		Consulting Geologist
Chapman Const. Co.		N9715X 210 Cessna		
Betty McNabb		N5924C Bonanza		Pleasure
Ted Nelson	N3440P Apache Twin			Radio & TV Station Owner, WSCM
Charles Hilton		N2936Z Tri Pacer		Attorney and Road Construction Co.
Ed Lankford		N6407N Seabee		Car Dealer

DAILY OPERATIONS RECORD

Date: _____

Time	Identification	Type	Takeoff	Landing
0730	N7749	Cessna 210	X	
0750	*N1475	Martin 404		X
0802	*N875	Aero Commander	X	
0839	*N6971D	Apache 12	X	
0840	N4317P	Apache	X	
0841	*N1475	Martin 404	X	
0930	*N7112P	Commanche		X
0950	N4317P	Apache		X
1020	N4317P	Apache	X	
1057	N3504Y	Cessna 210	X	
1125	N4317P	Apache		X
1205	*N9111T	Cessna 180	X	
1241	N4317P	Apache	X	
1245	*N370T	Apache	X	
1326	*N1079C	Mooney		X
1334	*N1079C	Mooney	X	
1335	N4317P	Apache		X
1400	*N68T	Cessna		X
1400	*N68T	Cessna	L	
1403	*N68T	Cessna		L
1403	*N68T	Cessna	L	
1406	*N68T	Cessna		L
1406	*N68T	Cessna	L	

* Elsewhere based Aircraft X Itinerant Operation L Local Operation

(S A M P L E)

SURVEY OPERATIONS RECAPITULATION

TYPE OF OPERATION	ACTUAL DATES OF SURVEY							TOTAL	
	8-1-71	8-2-71	8-3-71	8-4-71	8-5-71	8-6-71	8-7-71		
<u>ITINERANT OPERATIONS</u>									
* AIR CARRIER	14	14	14	12	14	14	14	96x52 = 4,992**	
** AIR TAXI/COMMUTER AIR CARRIER	3	3	3	3	4	4	3	23x52 = 1,196**	
GENERAL AVIATION	47	56	43	66	32	50	63	357x59 = 21,063***	
MILITARY	0	2	0	0	0	2	2	6x52 = 312**	
TOTAL ITINERANT OPERATIONS	61	72	57	78	46	66	79	459	27,563

LOCAL OPERATIONS

GENERAL AVIATION	37	33	24	59	2	6	14	175x52 = 9,100	
MILITARY	0	0	0	0	0	0	0	0	
TOTAL LOCAL OPERATIONS	37	33	24	59	2	6	14	175	9,100

* Obtained from schedules.

** After these figures have been computed, they should be adjusted prior to entry on the face of SO Form 7031-1 to compensate for unusual conditions occurring during the survey.

*** Use multipliers from Appendix 4

CY 74
MONTHLY CONVERSION MULTIPLIERS

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
ALABAMA	73	59	51	49	50	50	51	49	53	40	51	60
FLORIDA	52	51	46	49	53	59	54	54	56	47	50	55
GEORGIA	70	56	50	46	48	50	53	51	55	41	51	64
KENTUCKY	78	69	51	48	45	48	48	48	47	41	52	69
MISSISSIPPI	82	61	51	50	48	46	46	45	53	42	55	65
NORTH CAROLINA	71	59	50	46	47	50	50	53	55	40	51	66
SOUTH CAROLINA	68	55	49	48	48	50	52	51	53	40	53	66
TENNESSEE	76	62	51	48	48	46	47	49	50	44	52	66
PUERTO RICO	57	55	47	57	50	47	48	51	58	51	56	50
VIRGIN ISLANDS	55	55	48	49	50	47	46	56	65	55	58	47

10/7/75

SO 70312A
Appendix 5

AIRPORT SURVEY SCHEDULE
CY 1975 - CY 1976

AIRPORT NAME	CATEGORY ACTIVE POTENTIAL	SURVEY SCHEDULE CY 75 - CY 76	TYPE REPORT REQUIRED		SURVEYING FACILITY
			BASE	SUPPLEMENTAL	
<u>ALABAMA</u>					
Muscle Shoals	X	Nov.	X		MSL FSS
Mobile Aerospace	X	April	X		MOB ATCT/Non-FAA Tower Records
<u>FLORIDA</u>					
Boca Raton	X	April	X		PBI ATCT
Cocoa (Merritt Island)	X	Nov.	X		MLB ATCT
Jacksonville (Herlong)	X	Nov.	X		JAX ATCT
Lakeland	X	Nov.	X		TPA ATCT
Naples	X	Oct.	X		FMY ATCT
Sanford	X	Nov.	X		ORL ATCT
Lantana (Palm Beach Co.)	X	Nov.	X		PBI ATCT
<u>GEORGIA</u>					
Brunswick-Golden Isles	X	April	X		SSI ATCT
<u>KENTUCKY</u>					
Bowling Green	X	April	X		BWG FSS
<u>MISSISSIPPI</u>					
Olive Branch	X	April	X		MEM ATCT
<u>NORTH CAROLINA</u>					
Gastonia	X	April	X		CLT ATCT
<u>SOUTH CAROLINA</u>					
Columbia (Owens Field)	X	April	X		CAE ATCT
<u>TENNESSEE</u>					
Jackson (McKellar Field)	X	April	X		MKL FSS
Clarksville (Outlaw Field)	X	April	X		BNA ATCT

