

GLOSSARY

GLOSSARY

Access Road. The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

AGL (Above Ground Level). Altitude expressed as feet above terrain or airport elevation (*see MSL*).

AIP (Airport Improvement Program). A grant-in-aid program, administered by the Federal Aviation Administration.

Aircraft Category. Aircraft defined by its approach speed (from less than 91 knots to more than 166 knots).

Aircraft Group. Aircraft defined by its wingspan (from less than 49 feet to more than 262 feet).

ALP (Airport Layout Plan). Plan of airport indicating existing and proposed facilities.

Apron. An area on the airport designated for the parking, loading, fueling or servicing of aircraft.

ARP (Airport Reference Point). Approximate center of the airport defined by latitude and longitude.

ASV (Annual Service Volume). The maximum number of operations per year an airport can service.

ATC (Air Traffic Control). The FAA service providing separation services to participating airborne traffic and clearances to land, takeoff or taxi at airports with a control tower.

Aviation Easement. A form of legal land-use control restricting incompatible development of areas required for airport or aviation related activities.

AWOS (Automated Weather Observation System). Provides automated Airport weather observations to pilots on a discrete radio frequency via a compute-generated voice. Less sophisticated than ASOS.

Based Aircraft. Aircraft stationed at the airport on a permanent basis.

BRL (Building Restriction Line). A line defining building encroachment limits towards the runway centerline.

Critical Aircraft. The user aircraft that requires the most elaborate facilities at an airport; the aircraft for which the airport facilities are designed to accommodate.

CTAF (Common Traffic Advisory Frequency). The radio frequency, also called the *UNICOM* frequency, used by all traffic at an airport without an operating control tower to coordinate approaches and landings, takeoffs and departures. Pilots announce their positions, intentions and actions in the *traffic pattern* for the benefit of other traffic.

dB (Decibel). A unit of measurement used for defining a noise level or an exposure level. The number of decibels is calculated as ten times the base-10 logarithm of a ratio of mean-square pressure or noise exposure.

Displaced Threshold. The section of pavement behind a displaced threshold that may be available for takeoffs in either direction and landings from the opposite direction.

DOT. U.S. Department of Transportation.

FAA (Federal Aviation Administration). The U.S. Department of Transportation's Agency for aviation. In addition to regulating airports, aircraft manufacturing and parts certification, aircraft operation and pilot certification ("licensing"), the FAA operates air traffic control, purchases and maintains navigation equipment, certifies airports and aides airport development among other activities.

FAR (Federal Aviation Regulations). Commonly used term for the rules and regulations covering every aspect of aviation. Codified into "Parts".

FBO (Fixed Base Operator). An airport-based business which parks, services, fuels and may repair aircraft; often rents aircraft and provides flight training. The term was coined to differentiate FBO's from businesses or individuals without an established place of business at the airport.

GA (General Aviation). The 92% of U.S. Aircraft and more than 65% of U.S. Flight hours flown by other than major and regional airlines or the military. Often misunderstood as only small, propeller-driven aircraft. Even large jet or cargo planes operated under FAR Part 91 can be general aviation.

GPS (Global Positioning System). Satellite-based navigation system operated by Department of Defense, providing extremely accurate position, time, and speed information to civilian and military users. Based on a "constellation" of 24 satellites, GPS will replace ground-based navigation systems (*VOR*, *ILS*) as the primary worldwide air navigation system in the 21st century.

IFR (Instrument Flight Rules). Rules of the road for flights permitted to penetrate clouds and low visibility conditions by reference to cockpit, flight instruments and radio navigation. Aircraft must be equipped and pilots qualified and current for *IFR* flight. Flight plans and *ATC* clearances are required. Flights are monitored and traffic separated by Air Traffic Control, usually by radar.

ILS (Instrument Landing System). A precision instrument approach system utilizing radio transmitters at the runway ends which provide descent and course guidance to the runway permitting aircraft to land during periods of low ceilings or poor visibility.

INM (Integrated Noise Model). The FAA's standard methodology since 1978 for noise assessments. INM is a computer program used by over 700 organizations in over 50 countries to assess changes in noise impacts resulting from a variety of airport improvements.

Instrument Runway. An authorized runway approach end that provides instrument approach procedure.

Itinerant Operations. All other arrivals and departures not covered in the *local operations* description.

KNOT (Nautical mile per hour). Most common measure of aircraft speed. 100 knots equals 115 statute miles per hour. (For mph, multiply knots by 1.15).

Large Airplane. An airplane of more than 12,500 pounds (5,700 kg.) maximum certified takeoff weight.

Local Operations. Arrivals and departures of aircraft which operate in the local traffic pattern or within sight of the tower and are known to be departing for or arriving from flights in local practice areas within a 20 mile radius of the airport and/or control tower. Plus simulated instrument approaches or low passes at the airport executed by any aircraft. (FAA/AC 150/5070-6A).

MSL (Mean Sea Level). Altitude expressed as feet above sea level, rather than above local terrain (*AGL*) to ignore varying terrain elevations, all navigational altitudes and barometric altimeters are based on height above mean sea level. Only radar altimeters, which measure the distance between the aircraft and the ground at low altitudes indicate actual heights above the ground.

Nautical Mile. Most common distance measurement in aviation, equivalent to 1.15 statute (standard U.S.) miles.

NAVAID (Navigational Aid). Examples include REIL, VASI, PAPI, VOR, Rotating Beacons, etc.

NPIAS (National Plan of Integrated Airport Systems). Prepared by the FAA and updated and published every two years, identifies public use airports considered necessary to provide a safe, efficient, and integrated national system of airports that meets the needs of civil aviation, national defense, and the postal service. Field formulation of the NPIAS can be found in FAA Order 5090.3C.

Noise Contour. A line connecting equal points of noise exposure. Usually color coded by decibels.

Non-Precision Approach. Provides course guidance without vertical path guidance.

Non-Towered Airport. An airport without a control tower - the majority of America's 13,000 airports. Only 680 Airports have control towers. Non-towered airports are far from being "uncontrolled". Pilots follow *Traffic pattern* procedures and self-announce positions and intentions using the *Common Traffic Advisory Frequency (CTAF)*, usually called the *UNICOM* frequency.

OFA (Object Free Area). An area on the ground centered on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

OFZ (Obstacle Free Zone). The OFZ is the airspace below 150 feet (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protections for aircraft landing or taking off from the runway, and for missed approaches.

Operation. Either a takeoff or landing at an airport. *Touch-and-go* operations are considered two operations.

Part 91, 121, 125, 135. The parts of Federal Aviation Regulations (FAR's) covering non-commercial operations (*Part 91*), major scheduled air carriers (*Part 121*), commuters (*Part 125*), non-scheduled carriers and air taxis (*Part 135*).

Peak Hour. Represents the highest number of operations during the busiest hour of an average day of a peak month.

Precision Approach. Provides course guidance and vertical path guidance conforming to *ICAO* performance standards.

Rotating Beacon. A visual *NAVAID* displaying alternating white and/or colored light to identify the location and type of the airport.

RPZ (Runway Protection Zone). A trapezoidal area 200 feet beyond the runway end providing protection to people and property on the ground.

RSA (Runway Safety Area). An area around the runway suitable for reducing the risk of damage to aircraft in the event of an overshoot, undershoot or excursion from the runway.

Socioeconomic. Information dealing with population or economic characteristics of a region.

Small Aircraft. Airplanes with less than 12,500 pounds maximum certified takeoff weight.

Student Pilot. A pilot who is training for a private pilot certificate, either before or after the first solo. A student must obtain a third class medical certificate through an examination by an FAA-designated aviation medical examiner before being allowed to fly solo in a powered aircraft. The medical certificate for a student pilot has a student "license" printed on the back.

Taxilane. A defined path for aircraft to travel from parked positions (apron or hangars) or taxiways.

Taxiway. A defined path for aircraft to travel from runway ends or run-ups to the terminal apron.

Threshold. The beginning of a runway suitable for landing.

Touch-and-Go. A flight operation that begins with level flight in the "traffic pattern", descends and lands on the runway, and then takes off immediately after landing and returns to level flight.

Traffic Pattern. A standard rectangular flight pattern around the landing runway at an airport. Includes 45-degrees or crosswind entry to the rectangle, with downwind, base and final legs as sides of the rectangle. Standard 90-degree left turns around the rectangle (non-standard right-hand traffic pattern is noted in Airport Facility Directories) with downwind flown at a specific altitude, usually 1,000 or 1,500 feet above the airport elevation. At airports with a control tower; the pattern may be modified or short-cut according to *ATC* instructions.

Turboprop. An airplane using a turboprop engine, a jet rather than piston engine connected to a propeller. Such aircraft can be single or multi-engine. Turboprop engines are increasingly used when more horsepower is needed for speed or payload than the 300-400 horsepower available from current light-aircraft piston engines.

Unicom. A common, multi-purpose frequency used at most *non-towered airports* as the *Common Traffic Advisory Frequency*. AOPA coined the term (derived from the words "universal communications") in the 1950's. UNICOM is also used by a *Fixed Base Operator* for general administrative uses, including fuel orders, parking instructions, etc. Originally 122.8 MHz universally, now includes 122.7, 123.90 and other frequencies.

VFR (Visual Flight Rules). A defined set of FAA regulations and "rules of the road" covering operation of aircraft primarily by visual reference to the horizon (for aircraft control) and see-and-avoid procedures (for traffic separation). VFR is used by more than 70% of all flights; it is not, by definition, uncontrolled or out of control.

VOR (VHF Omnidirectional Range). Ground-based radio navigation aid. More than 1,000 VOR electronically defined Vector Airways and Jet Airways, "Highways in the sky". Most IFR and many VFR flights follow airway routes.

Wind Cone or Wind Sock. Conical wind direction indicator.

Wind Rose. A circular detail indicating the direction and percentages of the prevailing winds for a specific area.

Wind Tee. A visual device in the shape of a "T" used to determine wind direction.

APPENDIX

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KENT, OHIO

AL-5397 (FAA)

VOR/DME ACO 114.4 Chan 91	APP CRS 289°	Rwy ldg TDZE Apt Elev 1150	N/A N/A 1150
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VOR or GPS-A

KENT STATE UNIVERSITY (1G3)

▼ Use Akron-Canton altimeter setting.
▲ NA

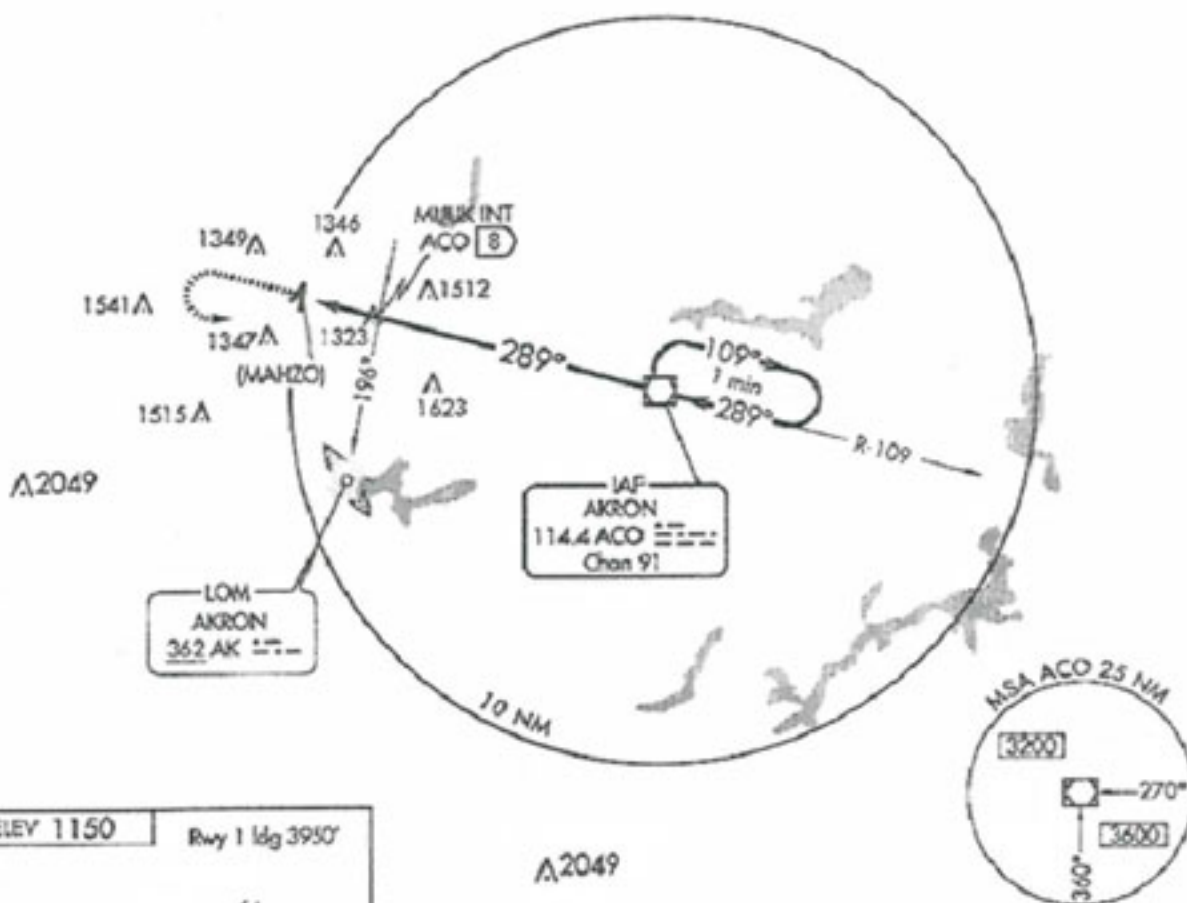
MISSED APPROACH: Climb to 3000 then left turn direct ACO VOR/DME and hold.

AKRON-CANTON APP CON*
118.6 226.4

CINC DEL
125.65

UNICOM
122.725 (CTAF)

122.90



ELEV 1150 Rwy ldg 3950'

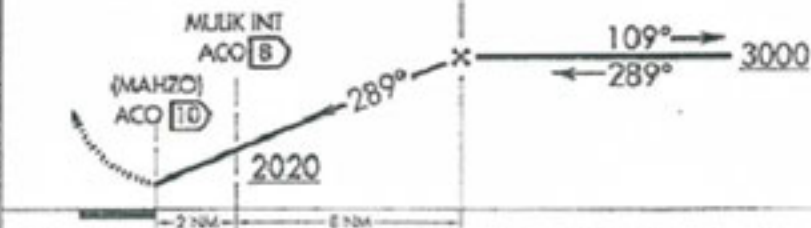


MIRL Rwy 1-19
REIL Rwy 1 and 19

FAF to MAP 10 NM

Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

3000 ACO 114.4



CATEGORY	A	B	C	D
CIRCLING	2020-1 870 (900-1)	2020-1½ 870 (900-1½)	2020-2½ 870 (900-2½)	NA
MULIK FOR MINIMUMS				
CIRCLING	1700-1 550 (600-1)	1700-1½ 550 (600-1½)	1700-1½ 550 (600-1½)	NA

KENT, OHIO
Amdt 12 02220

41°09'N-81°25'W
325

KENT STATE UNIVERSITY (1G3)
VOR or GPS-A

EC-2, 23 JAN 2003

102174\EXHIBITS\KSUAPPLATE

KENT, OHIO

AL-5397 (FAA)

APP CRS
196°

Rwy ldg 4000
TDZE 1134
Apt Elev 1134

GPS RWY 19

KENT STATE UNIVERSITY (1G3)



NA

Use Akron-Canton altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct AFTEL WP and hold.

AKRON-CANTON APP CON*

118.6 226.4

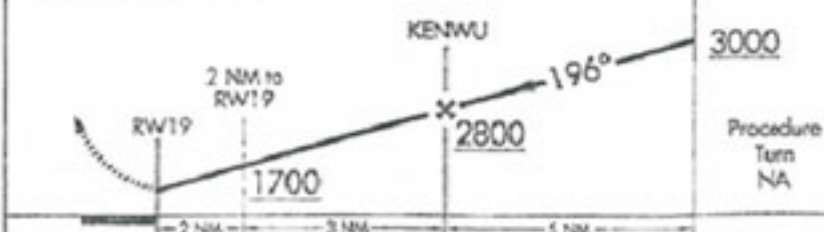
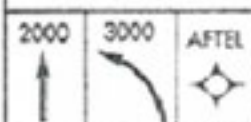
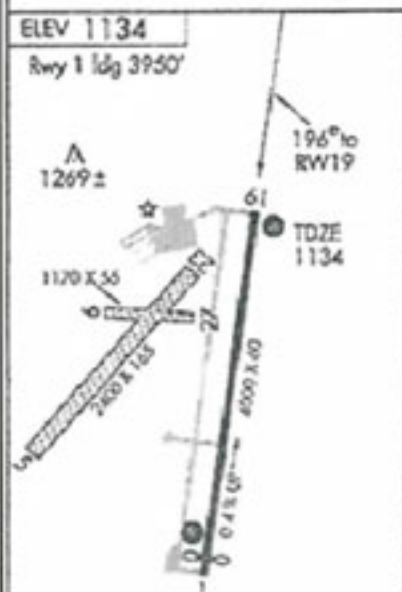
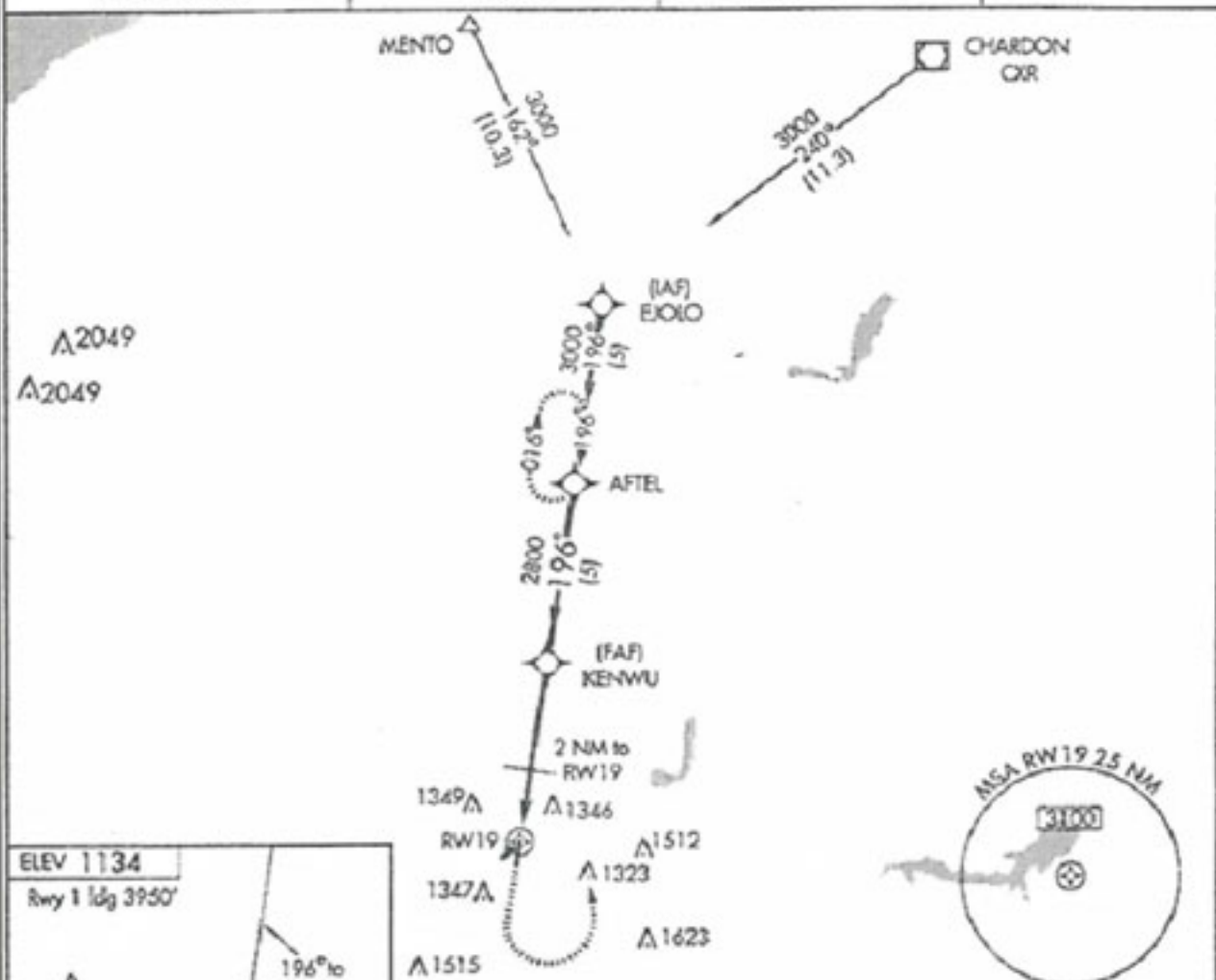
CLNC DEL

125.65

UNICOM

122.725 (CTAF)

122.90



CATEGORY	A	B	C	D
S-19	1580-1	446 (500-1)	1580-1¼ 446 (500-1¼)	NA
CIRCLING	1760-1	626 (700-1)	1760-1¼ 626 (700-1¼)	NA

KENT, OHIO

Orig 02220

KENT STATE UNIVERSITY (1G3)

GPS RWY 19

41°09'N 81°25'W

327

EC-2, 23 JAN 2003

102174 EXHIBITS\KSNAPPLATE

KENT, OHIO

326
AL-5397 (FAA)

LOM AK	APP CRS	Rwy ldg	3950
362	351°	TDZE	1129
		Apt Elev	1150

NDB or GPS RWY 1

KENT STATE UNIVERSITY (1G3)



NA

Use Akron-Canton altimeter setting.

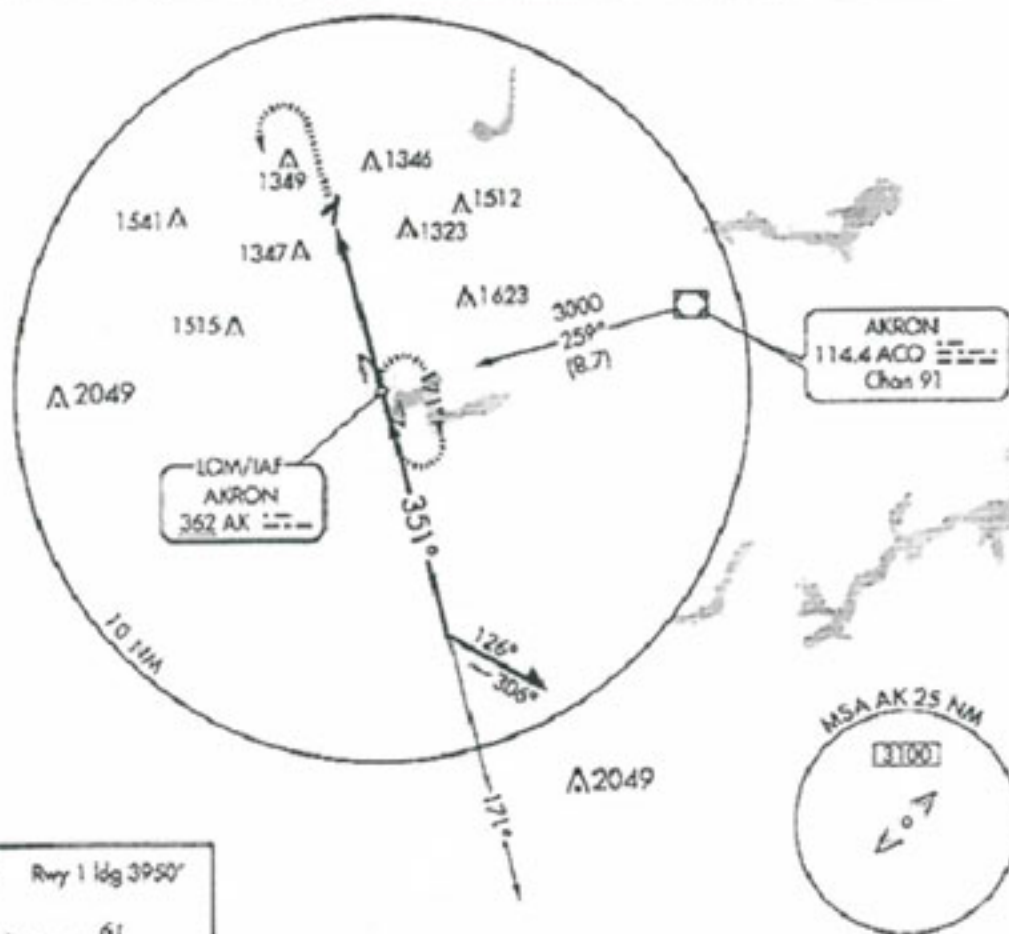
MISSED APPROACH: Climb to 3000 then left turn direct AK LOM, and hold.

 AKRON-CANTON APP CON*
118.6 226.4

 CLNC DEL
125.65

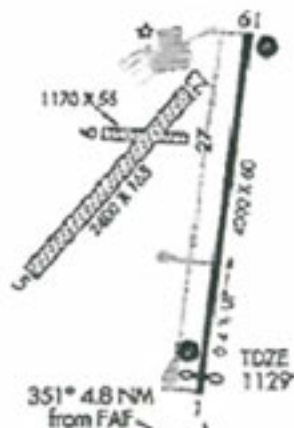
 UNICOM
122.725 (CTAF)

122.90



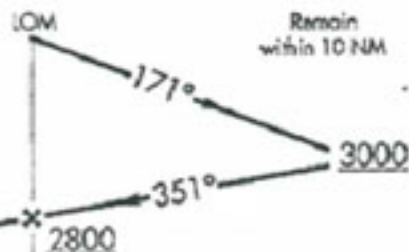
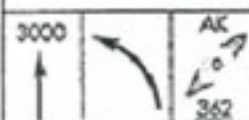
ELEV 1150

Rwy 1 ldg 3950'


 MRL Rwy 1-19
REIL Rwy 1 and 19

FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36



CATEGORY	A	B	C	D
S-1	1700-1	571 (600-1)	1700-1½ 571 (600-1½)	NA
CIRCLING	1700-1	550 (600-1)	1700-1½ 550 (600-1½)	NA

KENT, OHIO

Amdt 11 02220

41°09'N-81°25'W

 KENT STATE UNIVERSITY (1G3)
NDB or GPS RWY 1

EC-2, 23 JAN 2003

102174\EXHIBITS\KSUAPPLATE

5/11/03

102174

Estimate annual aircraft operations based on April/May machine counts. Note: actual counts were taken using 24 hour/7 day digital counters. Touch and go operations are not included on digital counters.

	Actual Takeoff and Landing Operations		
Counting Period	Flight Training	General Aviation	Total
03/28/03 - 04/04/03	564	144	708
04/04/03 - 04/11/03	534	135	669
04/11/03 - 04/18/03	844	209	1053
04/18/03 - 04/25/03	960	245	1205
04/25/03 - 05/02/03	980	249	1229
05/02/03 - 05/09/03	702	180	882
05/09/03 - 05/16/03 (break week)	502	216	718
05/16/03 - 05/23/03	850	226	1076
05/23/03 - 05/30/03	772	218	990
Total 9 weeks	6,708	1,822	8,530

April & May forecast is 16.9% of ASV. = $(50,470 + 13,160) = 63,630$

T&G = $50,470 \times 0.79 \times 0.33 = 13,157$ Say 13,160

Current Waiting List- T Hanger

Print Date: 7/17/2003

Date Applied	Name	Company	Street	City	State	Zip	Phone	Work	Plane	Comments
04/15/96	Redi Aircraft		10212 Northfield Rd	Cleveland	OH		(216) 467-8629	(216) 468-2330	N96522 Cessna 182	
06/17/96	Charles Spiegle		830 Sharon Ave	Cuyahoga Falls	OH	44771	(330) 929-0349			
07/18/96	Bay Aero, LTD		PO Box 45052	Westlake	OH	44145				
07/14/96	James Baker		2725 Parkside Dr	Hudson	OH	44236	(330) 650-6500			
07/17/96	Lisa M Hahn		9870 Fairmount Rd	Newbury	OH	44065	(216) 338-5363	(216) 338-5512		
10/18/96	Chuck Less						641-8580			
10/28/96	Bruce Triplett	KSU PD					(330) 672-3113			
02/19/97	Walter Moore		1330 Taft Ave	Cuyahoga Falls	OH	44223	(330) 923-1147	(330) 668-2669		
03/22/97	Ron Froge		Plymouth Dr	Cuyahoga Falls	OH	44223	(330) 929-7512			
03/22/97	L W Sarver		3241 Oakwood Dr	Cuyahoga Falls	OH	44223	(330) 929-3510			
06/07/97	James H Conler		3451 Hunters Crossing Rd	Stow	OH	44224			N525JT	
10/05/97	Robert Humphrey						(330) 920-0990	(216) 524-0560		
10/05/97	Mike Bingerman			Hudson			(216) 653-5730			
10/05/97	Rick Patterson	KSU PD							(330) 672-3111	
10/08/97	Don Flaut		4743 Stow Rd	Stow	OH	44224	(330) 688-9603			
10/28/97	Elbert Baker		21 Baldwin St	Hudson	OH	44236			N8LY	
01/07/98	Mike Palladino		1715 Leggett Rd	Montville	OH	44064	(440) 968-3751			
01/07/98	Ed Vaughan		34208 Aurora Rd	Solon	OH	44139	(330) 248-7995			
03/17/98	Lori Kleski		1376 Wimbledon	Stow	OH	44224	(330) 688-2768			
19	Number on waiting List									
Previously Contacted and given opportunity - declined										
08/06/90	Jim Orosz		486 Wyoga Lake Blvd	Stow	OH	44224	(330) 929-1992	(330) 379-5871	N18362	Not based on field
06/07/90	William Hughes		35 S Ovalt	Hudson	OH	44236	(330) 650-4627	(330) 856-1117	N2508U	Not based on field
06/18/91	Jean Wilcott		13845 Doubloon	Corpus Christi	TX	78418	(512) 949-7217			Not based on field
07/14/92	Steve Unger		26600 George Zeiger	Beechwood	OH		831-2681			Based on field
07/18/92	Joe Martanovic		2548 S Belvoir	University Heights	OH	44118	861-5434			Not based on field
08/01/92	William E Glaue		5407 Crystal Cove Circle	Stow	OH	44224	(330) 655-7675	(330) 535-3346		Not based on field
08/18/92	Paul Genour		5585 Ogilby Drive	Stow	OH	44224	(330) 656-3413			Not based on field
09/07/92	John West/Vincent Dunn	Director LCI	154 N Main St	Munroe Falls	OH		(330) 633-8873	(330) 688-1851		Not based on field
11/18/92	John Daily		80 S Summit Street	Akron	OH		(330) 376-3747			Based on field
02/07/93	Dr Michael Pryor		6534 Sherborn Lane	Hudson	OH	44236	(330) 650-0339			Requests 2 Hangers
02/26/93	Commercial Aviation		4020 Kent Rd	Stow	OH	44224	(330) 586-1234			Based on field
04/13/93	Richard Michaels						261-3500			Based on field
02/10/94	G David Frame		460 Greenmeadow Dr	Tallmadge	OH	44278	(330) 633-1199		N5772U	Not based on field
02/22/94	R P Flynn		5279 Burnett Rd	Kent	OH	44240			Helicopter	Not based on field
05/11/94	Rick Jenkins			Ravenna	OH		(330) 296-8213			Not based on field
08/12/94	Dodie Jewett			Kent	OH	44240	(330) 873-3601			Not based on field
07/24/95	Robert Elveridge		66 Loden Ave	Munroe Falls	OH	44262	(330) 588-5236			Not based on field
01/27/95	Stephen Sheffer		1670 Sassafras Ct #353	Kent	OH	44240	(330) 877-4938			Not based on field
02/01/95	Lawrence R Davis		518 Beryl Dr	Kent	OH	44240	(330) 577-8511			Based on field
02/25/95	Jay Wahl		9878 Hillsdale Rd	Brecksville	OH	44141	526-6384	447-5275		Based on field
03/25/95	Tom McNemey		3340 Kingston Pike #3	Knoxville	TN	37919	(615) 522-1001		Interested T-buids	Not based on field
06/26/95	George H Frost		544 Ivan Dr	Kent	OH	44240	873-1213			Not based on field
10/18/95	Chuck Less						641-8580			
12/17/95	Gary Amone		1600 Wood Lane	Peninsula	OH		(216) 657-2584	(216) 686-6810		Not based on field
01/15/96	Bruce Triplett	KSU PD					(330) 672-3070			
12/15/00	Paul J Connor		867 Morningview Ave	Akron	OH	44305	(330) 784-6623	(330) 845-2420		
04/13/01	Jason Lorenzan						(330) 963-3534			

Date 7/17/03	# of pages 1
From KSU Airport	
To Co/Dept	
Phone # 330-672-2640	
Fax # 330-672-2641	

Post-It* Fax Note 7671

To Richard Engineering

cc: JS, HS



RICHLAND ENGINEERING LIMITED

29 North Park Street, Mansfield, Ohio 44902-1769 • 419/524-0074 FAX 419/524-1812

102174

KENT STATE UNIVERSITY AIRPORT, STOW, OHIO AIRPORT USER SURVEY

This survey is being conducted to determine the extent and types of business and other use of Kent State University Airport. Please answer the following questions as they apply to you, your company or the institution with which you are affiliated. Your responses will be used for airport planning purposes only. Your assistance will be appreciated.

1. Do you, your company or institution own or lease an aircraft that utilizes Kent State University Airport for occasional visits? _____ Own _____ Lease. Please indicate the types and annual number of visits each airplane makes to Kent State University Airport.

	<u>Aircraft Type</u>	<u>No. of Annual Take-offs</u>
Aircraft No. 1	_____	_____
Aircraft No. 2	_____	_____

(If additional space is needed, please use the back of this form.)

2. Do you, your company or your institution do business with other companies which fly their airplanes into Kent State University Airport? _____ Yes _____ No. If "yes", please indicate the types of airplanes (or the company, etc. owning the equipment) and number of annual visits each aircraft makes to the airport.

	<u>Aircraft Type</u>	<u>No. of Annual Take-offs</u>
Aircraft No. 1	_____	_____
Aircraft No. 2	_____	_____

3. Does your company presently use other airports in traveling to destinations in the Summit/Portage County area? If so, please identify that airport and briefly indicate the reason for using it rather than Kent State University Airport.
4. Consideration is being given to improvements of the airport. What specific improvements would you recommend at the airport (or based upon your use or needs at the facility)?
5. As noted above, your response will be held in confidence and will be used for airport planning purposes only. In order to avoid re-contacting those who have responded to the survey, we are asking you to indicate your name, company, institution, email, telephone, business card, etc. below.

Respondent _____

For additional questions or comments please contact: Richland Engineering Limited, 29 N. Park Street, Mansfield, Ohio 44902, (419) 524-0074 or by email to: reltd@r-e-l.com

Thank you for your assistance.

Spalding/Emig Company

real estate appraising and consultation

John W. Emig, MAI
J. David Caldwell, MAI, CRE
Ann M. Rutledge, SRA
Michael A. Tribuzzo
Jeffery L. Wissler
Joanna G. Butler

March 5, 2002

Mr. Tom Clapper
Kent State University
E. Main and Lincoln
Kent, OH 44240

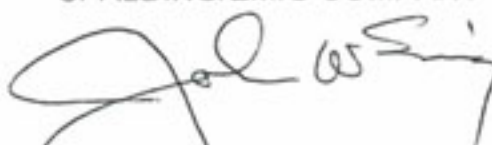
Dear Mr. Clapper:

Enclosed are sets of comparable sales information for single-family residential land parcels, multi-family residential sites and larger commercial parcels located throughout the local market area. You will note that the single-family land has transferred at prices ranging from approximately \$8,500 – \$20,000 per acre depending on locational desirability, physical characteristics, permitted density of development, etc. The multi-family land parcels vary widely in sale price per acre with those at the high end of the range reflecting relatively high density. The larger commercial land parcels fall within a relatively narrow range with those at the lower end of the range reflecting either extremely large parcels or those with topography/site preparation issues.

Please review the accompanying information and feel free to contact me with any questions you may have regarding these sales.

Sincerely,

SPALDING/EMIG COMPANY



John W. Emig, MAI
President

JWE/kmc

Attachments

VACANT LAND SALES SUMMARY - LARGER COMMERCIAL PARCELS

<u>LOCATION/DESCRIPTION</u>	<u>GRANTOR/ GRANTEE</u>	<u>SALE PRICE</u>	<u>SALE DATE</u>	<u>SIZE (ACRES)</u>	<u>PER/ ACRE</u>	<u>COMMENTS</u>
1. S/E Quadrant S. Arlington Road and Killian Road Springfield Township Summit County	W. Kanoy, Trustee et al./ LRC Southpointe Associates Ltd.	\$1,923,000	Mar-00	16.28	\$118,100	Reflects assemblage of five parcels for development of a new Lowe's store just south of Interstate 77.
2. S/S State Route 14 Streetsboro, Portage County	Interstate Park Development/ Home Depot USA Inc.	\$2,354,200	May-00	17.60	\$133,800	Rolling parcel partially below road grade improved after development with a Home Depot retail center.
3. S/W Corner State Route 43 and State Route 261 Kent, Portage County	Debartolo-Stow Associates/ 261 LP Limited Partnership	\$4,315,900	Apr-99	52.57	\$82,100	Also includes frontage on north side Meloy Road. Retail/commercial site for proposed 400,000± s.f. retail plaza facility.
4. W/S South Main Street Hudson, Summit County	Beuel Associates/ City of Hudson	\$4,525,000	Dec-99	36.20	\$125,000	Proposed retail center site acquired by City of Hudson.
5. W/S Hudson Drive, North of Graham Road Stow, Summit County	M. Balkanillo et al./ Lowe's Home Center Inc.	\$4,600,000	Dec-98	31.81	\$144,600	Assemblage of several parcels to develop a new Lowe's retail center.
6. S/S State Route 14 and N/S Seasons Road Streetsboro, Portage County	C. English III/ ER Services Inc.	\$5,207,500	Jan-01	61.47	\$84,700	Large site with sloping topography, developed after purchase with new retail complex.

COMPARABLE SALES SUMMARY - VACANT RESIDENTIAL DEVELOPMENT PARCELS

	ADDRESS/LOCATION GRANTOR/GRANTEE	SALE PRICE	SALE DATE	PARCEL SIZE (ACRE)	PRICE/ ACRE	COMMENTS
1.	East Side State Route 44 south of Tallmadge Road (CH 18) Rootstown Township, Portage County D & B Butch/ Clover Pointed Land Development, Ltd.	\$540,000	Apr-99	65.32 ac.	\$8,270	Sale price of \$540,000 plus \$213,000 to extend utilities (water & sewer). Proposed Harvest Hills subdivision to include 118 lots, 84 of which are pre-sold to Ryan Homes. \$6,381 per blank.
2.	West Side Page Road north of Frost Road Streetsboro, Portage County F. Dunlap, Trustee/ Hannum Crossing Development Company	\$400,000	Feb-99	46.92 ac.	\$8,530	Residential development parcel with all city utilities available.
3.	South of Drexmore Drive Cuyahoga Falls, Summit County McGrail & Sommers/ A.R. Lockhart Dev. Co.	\$428,000	Aug-98	45.97 ac.	\$9,310	Rolling, wooded site, border existing Regent Park subdivision and industrial park, proposed Timbercreek subdivision. 53 lots, \$52,000 - \$75,000 price range, \$8,075/blank.
4.	East Side State Route 43, south of State Route 303 Streetsboro, Portage County H. Kangesser et al./A.R. Lockhart	\$1,871,000	Aug-99	196.60 ac.	\$9,520	Rolling, partially wooded, proposed development tract.
5.	East Terminus Morningview Drive and Nandor Drive Tallmadge, Summit County C. Scherer/Broco LLC	\$325,000	Oct-98	32.75 ac.	\$9,924	Vacant parcel at terminus older (1960's) residential neighborhood. New residential subdivision (Morningview Estates) with 38 lots, .46 acre avg. size. \$50,000 - \$62,000 price range, \$8,553 per blank.

COMPARABLE SALES SUMMARY - VACANT RESIDENTIAL DEVELOPMENT PARCELS

<u>ADDRESS/LOCATION GRANTOR/GRANTEE</u>	<u>SALE PRICE</u>	<u>SALE DATE</u>	<u>PARCEL SIZE (ACRE)</u>	<u>PRICE/ ACRE</u>	<u>COMMENTS</u>
6. North side of Chart Road Cuyahoga Falls, Summit County Vaughn et al/ Creekside Ridge Development Co., Inc.	\$840,000	Mar-01	84.441 ac.	\$9,948	Gently rolling mostly open site with all utilities, 30% of site area in open space/wetlands. Development required construction of lift station. 89-lot, 3-phase subdivision (Creekside Ridge) with 13 frontage lots on Chart Road, dated 12/99. 83.25 acres net of roadway, \$9,438/blank.
7. West Side State Route 43, North of Delmonte Boulevard Streetsboro, Portage County Portage Woods LLC/Streetsboro Ltd.	\$348,205	Apr-00	30.82 ac.	\$11,300	Proposed 24-lot Windgate Ridge Subdivision Phase 1. \$14,509/lot.
8. North side Bartlett Road & south side Mennonite Road Aurora, Portage County R. Stoltzfus, Trustee/ TX Four Holdings, LLC	\$1,857,506	Jul-99	161.52 ac.	\$11,562	Likely development tract situated between two streets, R-1 zoning, 1.5 acre minimum.
9. Northeast Corner Page Road and Bartlett Road Aurora, Portage County Harmon Farms/City of Aurora	\$1,500,000	Oct-99	128.00 ac.	\$11,720	Purchased by City of Aurora for park expansion. Seller retained life estate for farm house. \$500,000 down plus \$200,000/yr. for five years. R-1 zoning, 1.5 acre minimum.
10. East Side Diagonal Road Franklin Township, Portage County J. Lower Estate/Richfield Group Inc.	\$859,000	Dec-98	68.42 ac.	\$12,555	Rolling, wooded parcel with some wetlands and ponds, proposed 34-lot Royal Lake Subdivision, most lots priced \$78,000-\$100,000, \$25,265/blank.

COMPARABLE SALES SUMMARY - VACANT RESIDENTIAL DEVELOPMENT PARCELS

<u>ADDRESS/LOCATION GRANTOR/GRANTEE</u>	<u>SALE PRICE</u>	<u>SALE DATE</u>	<u>PARCEL SIZE (ACRE)</u>	<u>PRICE/ ACRE</u>	<u>COMMENTS</u>
11. Part of Lot No. 26 W. Pioneer Trail Aurora, Portage County R. Davis Jr./Prestige Woods Ltd.	\$539,000	Jan-99	42.35 ac.	\$12,730	Proposed residential subdivision to be known as Prestige Woods. R-3 zoning.
12. S. Side Fairchild Avenue Kent, Portage County Kamburoff Family LP/ Forest lakes Development Co. Ltd.	\$1,198,000	Dec-00	83.85 ac.	\$14,287	Proposed Lakes at Franklin Mills to include 215 detached and cluster units, \$5,572/blank.
13. P.O. Lots 57 & 67, State Route 14 Streetsboro, Portage County Ohio Bulk Transfer Company/ A.R. Lockhart Development Co.	\$750,000	Jun-98	51.40 ac.	\$14,590	Part of proposed single-family subdivision and golf course.
14. West Side Diagonal Road North of State Route 14 Streetsboro, Portage County Panorama Development Ltd./R. Andrews	\$550,000	Sep-00	31.64 ac.	\$17,380	Adjoins existing residential subdivision, to be developed as 43 residential lots known as Waterford Estates, \$12,791 per blank.
15. 929 E. Mennonite Road Aurora, Portage County R. R. Wantz/City of Aurora	\$820,000	Jul-99	44.16 ac.	\$18,570	Purchased for park expansion. Property included 4,000 s.f. home built in 1978 with barn and pool all in fair condition. Plans for development of 11 additional single-family lots at time of sale.
16. North side of Call Road Stow, Summit County Clarke, Stehman & Hanson/ Pebblehurst LLC	\$722,349	Jun-99	37.119 ac.	\$19,460	Partially rolling and wooded site with all utilities, 20% of site area in pond/drainage easement/open space. 68-lot, 3-phase subdivision. Most lots priced \$67,000--\$80,000; (Pebblehurst) \$10,623/blank.

COMPARABLE SALES SUMMARY - VACANT RESIDENTIAL DEVELOPMENT PARCELS

<u>ADDRESS/LOCATION</u> <u>GRANTOR/GRANTEE</u>	<u>SALE</u> <u>PRICE</u>	<u>SALE</u> <u>DATE</u>	<u>PARCEL</u> <u>SIZE (ACRE)</u>	<u>PRICE/</u> <u>ACRE</u>	<u>COMMENTS</u>
17. North Side Chart Road Cuyahoga Falls, Summit County Union Commerce Corp./ Beirne Co. LLC	\$1,400,000	May-00	69.2 ac.	\$20,231	Mostly open site with all utilities, proposed 114-lot, 3 phase subdivision (Blossom Glen) by Ryan Homes. \$12,281/lot.

COMPARABLE SALES SUMMARY - MULTI-FAMILY LAND PARCELS

ADDRESS/LOCATION GRANTOR/GRANTEE	SALE PRICE	SALE DATE	PARCEL SIZE		PRICE/ ACRE	NO. OF UNITS	PRICE/ UNIT	COMMENTS
			(ACRES)	ACRE				
1. E/S Mayfair Road south of Raber Road Green, Summit County Rainieri Holdings Inc./ Prestwick Pointe Limited	\$586,500	Mar-01	10.19	\$57,600	N/A	N/A		Split from Prestwick Country Club, proposed residential development.
2. 824 Ghent Road Fairlawn, Summit County J. Gillette/ J. Joondeph, Trustee	\$590,000	May-98	13.91	\$42,400	110	\$5,364		Irregularly shaped parcel located in close proximity to Interstate 77. New Lenox Village complex. 7.9 units/acre
3. E/S Columbia Woods Drive Norton, Summit County Albrecht Inc./Larry R. Hecky	\$744,167	Sep-98	15.939	\$46,688	160	\$4,651		Level site, all utilities available. Zoned PD-1, planned development district. 160 units proposed. 10.0 units/acre.
4. N. Side Overlook Drive, E. of Sawbury Avenue Alliance, Stark County United Nat'l Bank & Trust Co., Trustee/ New Life Development Co.	\$538,000	Feb-99	16.5579	\$32,500	44 potential	\$12,227		Proposed Bridlewood Village Condo, density of approximately 2.7 units/acre. All city utilities. Existing residence on frontage.
5. South Side Howe Road Tallmadge, Summit County Baker R.E. Holdings Ltd./ Concept Communities LLC	\$1,284,450	Mar-00	17.619	\$72,900	80	\$16,056		Part of former Bakers Acres public golf course, just east of Chapel Hill Mall, proposed Villas at Chapel Hill to include 20 4-unit buildings with finished condo units of 1,170 - 1,735 s.f. priced at \$122,900 - \$165,900. 4.5 units/acre.
6. Montville Drive Montville Township, Medina County Michael J. DiSanto/ Stonebrook Holdings Ltd.	\$1,460,000	Jan-99	18.2729	\$79,900	144	\$10,139		Central utilities, adjacent to Interstate 71. Proposed Stonebrook Apartment complex. Density 7.9 units/acre.

COMPARABLE SALES SUMMARY - MULTI-FAMILY LAND PARCELS

ADDRESS/LOCATION GRANTOR/GRANTEE	SALE PRICE	SALE DATE	PARCEL SIZE (ACRES)		PRICE/ ACRE	NO. OF UNITS	PRICE/ UNIT	COMMENTS
7. 2715 Copley Road Copley Township, Summit County Oshux Inc./Ameri-Con Copley Ltd.	\$625,000	Oct-00	21.78		\$28,700	132	\$4,735	Situated just east of Jacoby Road. Former miniature golf course to be redeveloped as a 132-unit cluster home project indicating density of 6.1 units/acre.
8. East Side Hudson Drive Stow, Summit County Kensington Pointe/H S Land Assoc LLC Maxine V. Jackson/H S Land Assoc LLC	\$2,444,500 \$135,500 \$2,580,000	Jun-99 Jun-99	23.85 25.01		 \$103,159	 373	 \$6,917	Gently rolling site, all utilities available. Situated near SR 8 expressway. Zoned C-7 Commercial, permitting multi-family use. Includes 1.2 acres with house to be razed. Sale contingent on zoning, plan approval and included site plan, preliminary building plans, and preliminary site work. Density 14.9 units/acre.
9. South Side Ridgewood Road Copley Township, Summit County A. Bosshard/Visting Nurse Service	\$1,000,000	Jul-99	25.56		\$39,124	N/A	N/A	Mixed residential and industrial zoning with all central utilities available. Purchased by adjoining property owner.
10. South Side Medina Road Medina, Medina County Liborio W. Marty/Waterford Village Apt. Ltd. Ptn.	\$936,000	Aug-98	26.00		\$36,000	194	\$4,825	Waterford Apartments constructed. Rolling, all central utilities. 7.5 units/acre.
11. Fairway Park Drive Copley Township, Summit County Montrose Development Inc./ Fairway Park Properties Inc.	\$2,070,000	Jul-01	26.26		\$78,827	308	\$6,721	Previously leased beginning 1998 for a 95-year term. Indicates an overall capitalization rate of 9.6%. Situated near intersection Interstate 77 and State Route 18 behind retail development. Density of 11.7 units per acre.

COMPARABLE SALES SUMMARY - MULTI-FAMILY LAND PARCELS

ADDRESS/LOCATION GRANTOR/GRANTEE	SALE PRICE	SALE DATE	PARCEL		NO. OF UNITS	PRICE/ UNIT	COMMENTS
			SIZE (ACRES)	PRICE/ ACRE			
12. Center Road Brunswick, Medina County Thomas G. Simon/Village in The Park	\$925,000	Jul-98	26.52	\$34,879	204	\$4,534	204 units proposed. 7.7 units per acre.
13. Frost Road Streetsboro, Portage County York Dev. Ltd/Caroline Realty LLC	\$2,900,000	Nov-99	28.96	\$100,142	408	\$7,108	Irregular shape parcel in PUD with adjacent apartments, condominiums, assisted living and single family uses. Two story garden apartment planned. First phase Spring 2000 start. Planned density is 14 units per acre.
14. 10277 Valley View Road Northfield Center Township, Summit County Faith Fellowship Church Inc./Hoffman Development Company LLC	\$1,118,000	Oct-00	30.29	\$36,900	61	\$18,328	Proposed cluster project with completed units to market in a price range of approximately \$300,000. Density of approximately 2 units per acre.
15. S. of State Route 18 & E. of Montville Drive Montville Township, Medina County Millennium Community/ Woodford Commons LLC	\$2,000,000	Jan-01	43.14	\$46,361	NA	NA	Situated to rear or south of commercial development along SR18. Proposed cluster home project.
16. South Side Norton Road Stow, Summit County Sowel Development Group/Whitlatch Co.	\$2,145,000	May-97	55.34	\$38,760	195	\$11,000	Condo site, adjoins existing project. Includes 18 acre lake. 3.5 units /acre.
17. S. Side Ridgewood Road, west of S. Cleveland-Massillon Road Copley Township, Summit County K. Rohrer Jr./Sumner Home for the Aged	\$1,900,000	Dec-99	66.5	\$28,600	NA	NA	Proposed site of elderly community.

COMPARABLE SALES SUMMARY - MULTI-FAMILY LAND PARCELS

ADDRESS/LOCATION GRANTOR/GRANTEE	SALE PRICE	SALE DATE	PARCEL		NO. OF UNITS	PRICE/ UNIT	COMMENTS
			SIZE (ACRES)	PRICE/ ACRE			
18. NW Corner Mayfair Road & Raber Road Green, Summit County Mayfair Country Club Inc./ Mayfair East Developers LLC	\$2,300,000	Oct-01	81.00	\$28,400	123	\$18,700	Former Mayfair East Golf Course to be developed as Stratford Green at Mayfair East including 123 detached and duplex residences. 1.5 units/acre.
19. S. Side Raber Road Green, Summit County Glacier Ridge Properties Limited/The Chapel	\$3,200,000	Apr-01	85.22	\$37,500	N/A	N/A	Located near intersection Interstate 77 and Massillon Road. Being developed as a church complex.

SUMMARY OF SALES INFORMATION

Sale #	Parcel Size	Permitted Density (Unit/Acre)	Price/Acre	Price/Unit
1	10.19 ac.	N/A	\$57,600	N/A
2	13.91 ac.	7.9	\$42,400	\$5,384
3	15.94 ac.	10.0	\$46,668	\$4,651
4	16.56 ac.	2.7	\$32,500	\$12,227
5	17.62 ac.	4.5	\$72,900	\$16,056
6	18.27 ac.	7.9	\$79,900	\$10,139
7	21.78 ac.	6.1	\$28,700	\$4,735
8	25.01 ac.	14.9	\$103,159	\$6,917
9	25.56 ac.	N/A	\$39,124	N/A
10	26.00 ac.	7.5	\$36,000	\$4,825
11	26.26 ac.	11.7	\$78,827	\$6,721
12	26.52 ac.	7.7	\$34,879	\$4,534
13	28.96 ac.	14.0	\$100,142	\$7,108
14	30.29 ac.	2.0	\$36,900	\$18,328
15	43.14 ac.	N/A	\$46,361	N/A
16	55.34 ac.	3.5	\$38,760	\$11,000
17	66.50 ac.	N/A	\$28,600	N/A
18	81.00 ac.	1.5	\$28,400	\$18,700
19	85.22 ac.	N/A	\$37,500	N/A

Note: Generally, larger parcels tend to sell at a lower price per acre than smaller parcels. Those with higher permitted density tend to sell at a higher price per acre and lower price per unit than those with lower density.

Shalersville Township and City of Stow Comparisons

	1990	2000	% Growth
Stow			
Population	27,702	32,139	16.02%
Median Household Income	49,638	57,525	15.89%
Median Home Value	83,700	141,500	69.06%
Shalersville Township			
Population	5,270	5,976	13.40%
Median Household Income	36,439	49,671	36.31%
Median Home Value	73,000	110,900	51.92%

City of Stow / Allocation of Land Area

	1990		1999	
	Acres	% of Total Acres in City	Acres	% of Total Acres in City
Developed				
Residential	4,008	36.30%	4,692	42.50%
Commercial	307	2.78%	415	3.76%
Industrial	388	3.51%	433	3.92%
Conservation, Parks, schools, Parks, Schools, Publicly Owned and Land Remaining in Roads	2,834	25.67%	2,712	24.57%
Subtotal	7,537	68.27%	8,252	74.75%
Undeveloped				
Residential	2,262	20.49%	1,769	16.02%
Commercial / Residential	180	1.63%	184	1.67%
Industrial	1,061	9.61%	835	7.56%
Subtotal	3,503	31.73%	2,788	25.25%
Total Acres in City	11,040	100%	11,040	100%

*no comparable
on
Shalersville
Twp
yet
found.*

* Note corn

City of Stow Population Growth Projections

	1990	2000	2005	2010	2015
Population	27,702	32,139	34,124	34,729	36,563
Pop. % Growth		16.02%	6.18%	1.77%	5.28%
Number of Dwellings	10,676	12,852	15,166	15,786	17,006
% Dwelling Growth		20.38%	18.00%	4.09%	7.73%

City of Stow / Net Fiscal Benefit by Land Use by Acre

Residential	City	Schools	Net Loss or Gain
Single Family Homes	\$588	\$1,486	\$2,074
Single Family, R-2, R-3	\$2	\$1,015	\$1,017
Condominium	(\$74)	\$3,753	\$3,679
Multi-Family	(\$2,537)	(\$3,655)	(\$6,192)
Non Residential			
Retail	(\$2,489)	\$8,203	\$5,714
Office	\$7,113	\$20,702	\$27,815
Industrial	\$2,713	\$3,305	\$6,018

Sources: 1990 and 2000 U.S. Census, the Stow Comprehensive Development Plan, and Portage Cou