CASE NO. 687-AM-11 & 688-S-11 AMENDED

SUPPLEMENTAL MEMORANDUM Champaign April 17, 2013

County Department of Petitioners:



Brookens Administrative Center 1776 E. Washington Street

Urbana, Illinois 61802

Philip W. and Sarabeth F. Jones 175N CR1600E Villa Grove, IL

Site Area:

Approx. 14 acres Time Schedule for Development:

Immediate

Case 687-AM-11

Request: Amend the Zoning Map to (217) 384-3708 change the zoning district designation from CR Conservation Recreation to AG-1 Agriculture.

> Location for Case 687 & 688: An approximately 14 acre tract of land that is located in the North Half of the South Half of the Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois Route 130 (CR1600E) and 1.328 feet south of the intersection of Illinois Route 130 and CR 200N and County Highway 16 and commonly known as the property at 175N CR1600E, Villa Grove.

Prepared by:

John Hall

Zoning Administrator

Andrew Kass

Associate Planner

Case 688-S-11

Request: Authorize the construction and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and also for helicopter use for public safety assistance as needed and with limited helicopter use for personal use, as a Special Use on land that is proposed to be rezoned to the AG-1 Agriculture Zoning District from the current CR **Conservation Recreation Zoning** District in related Zoning Case 687-AM-11; and with a waiver of a Special Use standard condition required by Section 6.1 that requires compliance with Footnote 11 of Section 5.3.

STATUS

A letter (with attachments) has been received from neighbors Larry Hall & Julia Wright-Hall. See Attachments A.

The Petitioner submitted a Property Management Plan on March 22, 2013. It is included separately and briefly reviewed below.

The suitability of the subject property for the CR District was reviewed initially in the Supplemental Memorandum dated June 16, 2011, and summarized as item 9.C. of the Finding of Fact for Case 687-AM-11. New evidence is proposed below for that suitability analysis. See the attachment.

The Revised Draft Finding of Fact for Case 687-AM-11 has been revised to consider the map amendment on the basis of the by-right uses separately from the proposed Special Use Permit.

There is no clear achievement of Goals 4 and 8 in Case 687-AM-11. See below and items 14 and 18 in the Finding of Fact. A new assessment of "PREVENT ACHIEVEMENT" is also proposed for Goals 4 and 8 in the Finding of Fact.

See pages 30-33 of the Summary of Evidence of Case 688-S-11 for all special conditions.

DOCUMENTS RECEIVED AT MARCH 14, 2013, PUBLIC HEARING

The Documents of Record have been updated to include all of the documents received at the March 14, 2013, public hearing. See the attached Draft Summary of Evidence and Draft Finding of Fact. The same documents have been available on the website since March 18, 2013.

LETTER FROM NEIGHBORS LARRY & JULIA WRIGHT-HALL

A letter was received from neighbors Larry Hall & Julia Wright-Hall on April 15, 2013, with attachments. Note that the complete submittal was provided to the petitioner and ZBA members only. The attachments are available on the website. See attached.

PROPERTY MANAGEMENT PLAN

A Property Management Plan for the site has been prepared by the Champaign County Soil and Water Conservation District. See the attachment.

The Plan is difficult to summarize but is apparently for the entire property and includes Natural Resource Conservation Service (NRCS) recommendations for timber areas (NRCS Illinois Standard #666 Forest Stand Improvement Practice) and grassed areas (NRCS Standard #645 Upland Wildlife Habitat Management and miscellaneous (NRCS Standard #647 Early Successional Habitat Development Management). The NRCS practice standard for prescribed burning is also included.

The Plan really does not seem like a specific management plan for the property but seems to be simply the NRCS guidelines that a management plan could be based upon. In fact, the cover sheet refers to the fact that the National Wild Turkey Federation has a forester in our area that could prepare a specific plan for the property if desired.

IMPACTS TO CR DISTRICT HABITATS

A copy of the Revised Plan And Profile Of Landing Area received March 12, 2012, has been annotated to illustrate the likely impacts to CR District habitat. A revised illustrative map is also attached that illustrates the woodlands affected by the proposed runway. See attached.

The anticipated impacts are similar to those of the previous plan but shifted somewhat to align with the revised location of the proposed runway.

The Supplemental Memorandum dated March 8, 2013, included alternative versions of Draft evidence regarding the impacts to CR District habitats and scenic and natural areas. The intent of the alternative versions of the Draft evidence was to help the ZBA characterize the degree of impact. The ZBA had no time for discussion of that Draft evidence at the March 14, 2013, public hearing and so it is included here as Attachment H.

AREAS OF SUBJECT PROPERTY MOST SUITABLE FOR CR DISTRICT

The suitability of the subject property for the CR District was reviewed initially in the Supplemental Memorandum dated June 16, 2011, and summarized as item 9.C. of the Finding of Fact for Case 687-AM-11. That suitability analysis did not include consideration of either the impacts to CR District habitat or consideration of the separation to the nearest dwelling. A Revised Plan And Profile Of Landing Area received March 12, 2012, has been annotated to indicate the areas on the subject property that are most suitable for the CR District. The illustration indicates the following:

- 1. The approximate line of existing trees.
- 2. The height of 80 feet based on the "site index" for white oak trees from Table 11 of the the Soil Survey of Champaign County, Illinois.
- 3. The Base Flood (annual flood with a one percent chance of occurrence annually) Elevation of 654.5 feet Mean Sea Level.
- 4. The area where the hangar is proposed is indicated as "very highly suited" to the CR District based on the vegetation.
- 5. The west 600 feet of the area proposed for rezoning is indicated as "highly suited" to the CR District based on (a) the minimum separation required to ensure that the Approach Area for a Restricted Landing Area would not interfere with adjacent woodlands based on site index of 80 feet and (b) the area below the Base Flood Elevation. Note that this results in a runway of only 1,270 feet which is less than the minimum IDOT requirement of 1,600 feet.
- 6. An area indicated as "highly suited based on compatibility of proposed Special Use Permit with the adjacent dwelling". Note that this is the area within 230 feet of the adjacent dwelling at 177 CR1600E (Hall dwelling) based on the compatibility of the proposed RLA with that dwelling.

The above analysis has been added to item 9.C. of the Finding of Fact for Case 687-AM-11.

CONSIDERATION OF BY-RIGHT USES AND THE PROPOSED SPECIAL USE PERMIT FOR THE MAP AMENDMENT

The Revised Draft Finding of Fact for Case 687-AM-11 has been revised to consider the map amendment on the basis of the by-right uses separately from the proposed Special Use Permit.

GOALS AND POLICIES WITHOUT A STAFF RECOMMENDATION

The Findings for Case 687 and 688 are interrelated and the Board needs to carefully coordinate the evidence and Findings in both cases. The most careful coordination will be required for the following objective and policies in Case 687 for which there is no staff recommendation which are reviewed below.

Goal 4 due to concerns about policy 4.3.1 that states as follows:

April 17, 2013

"On other than best prime farmland, the County may authorize a discretionary review development provided that the site with proposed improvements is suited overall for the proposed land use."

Goal 8 due to concerns about the following policies:

Policy 8.5.1 that states "For discretionary development, the County will require land use patterns, site design standards and land management practices that, wherever possible, preserve existing habitat, enhance degraded habitat and restore habitat."

Policy 8.5.2 that states "The County will require in its discretionary review that new development cause no more than minimal disturbance to the stream corridor environment."

Policy 8.6.2 that states:

- a. "For new development, the County will require land use patterns, site design standards and land management practices to minimize the disturbance of existing areas that provide habitat for native and game species, or to mitigate the impacts of unavoidable disturbance to such areas.
- b. With regard to by-right development on good zoning lots, or the expansion thereof, the County will not require new zoning regulations to preserve or maintain existing onsite areas that provide habitat for native and game species, or new zoning regulations th

ATTACHMENTS

- A Letter submitted by Larry Hall at March 14, 2013 public hearing
- B Emails & tree information submitted by Julia Wright-Hall at the March 14, 2013, public hearing (included separately)
- C Letter from Larry Hall & Julia Wright-Hall received April 15, 2013, with attachments (included separately; full attachments only included for ZBA members but are available on website)
- D Phil Jones Property Management Plan received March 22, 2013 (included separately)
- E Site map of trees planted by Jones Family received March 14, 2013(included separately)
- F Plan And Profile Of Landing Area (Revised Site Plan) received March 12, 2012
- G Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Proposed Separations
- H Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Likely Impacts To CR District Habitat
- I Illustration of extent of Affected Woodlands under the Western Approach Area. Annotated Excerpt from the *Soil Survey of Champaign County, Illinois*. United States Department of Agriculture Natural Resources Conservation Service. 2003.
- J Likely Impacts Of Proposed Special Use Permit On The Scenic And Natural Areas In The CR District
- K Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Areas Proposed for Rezoning That Are Best Suited For CR District
- L Revised Draft Summary of Evidence for Case 688-S-11 (included separately)
- M Revised Draft Finding of Fact for Case 687-AM-11 (included separately)
- N Draft minutes for Cases 687-AM-11 and 688-S-11 for the March 14, 2013, public hearing (included separately)

To: Champaign County Zoning Board of Appeals

Re: case no. 687-AM-11 and 688-S-11

Thought you should know...

At approximately 5:30 PM, on August 11, 2011, just two hours before the zoning board hearing regarding the rezoning request of Mr. Jones for the purpose of the establishment of a "restricted landing area", Mr. Phillip Jones called me on the phone and asked "What do I need to do to get you to support me on my rezoning? You want me to remove the berm? ...the trees?" I told him we could not support the landing strip. He stated "if he didn't get his way, he didn't know what else he would do with the land." He said maybe he'd run cattle and horses on it. He said I'd probably dislike that smell and noise more than I disliked the planes. I replied that I wouldn't oppose him on that. He said, "...maybe he'd even run hogs out there."

Jones also stated that he had let the weeds grow on the berm to the south of our home (which he told us earlier was only temporary storage of dirt to be used elsewhere) to "totally" block our view since we opposed him. He said "things could get nasty." I asked if this was a threat. He said, he didn't know, it could just get nasty.

In the course of our conversation I asked him if he was going to land crop dusting/spraying planes out there. He stated that he was not going to be able to accommodate crop dusting/spraying because he found out the trees at the end of the runway back by the woods were too tall and the runway was too short. Apparently, he had planned to accommodate crop dusting planes; information that he failed to indicate on his petition.

Jones also challenged the professional opinion letter from our realtor. He said, "Anyone could get a realtor to write a letter saying anything." I told Jones I hadn't approached the realtor we used in that manner. He then said that if I thought it would hurt our property, then have it appraised and he'd pay us market value for our property. I indicated that we were here because we wanted to retire here and if we wanted to move, we wouldn't be opposing him. He said, "Okay, we'll just see what happens."

Not during his phone conversation and in none of his testimony before this board, have I heard Phillip Jones mention any concern or care for the neighborhood. He apparently feels that he should get his way and he has consistently demonstrated that he will do anything to obtain his goal. Not money nor intimidation can coerce our support for an activity which obviously is NOT in the best interest of us, our neighborhood, the people who live there, and the existing zoning standards.

Submitted by:

Larry Hall 177 S CR 1600 E Villa Grove, IL 61956

@ Submitted by Larry Hall at 3-14-13 public hearing

RE: I rees along the east pranch of the Emparras River at 3-14-13 Page 1 of 1

Submitted by Julia Wright- Hall at 3-14-13

RE: Trees along the east branch of the Embarras River

Jansen, Roger [Roger.Jansen@Illinois.gov]

Sent: Wednesday, January 09, 2013 12:57 PM

To: Wright, Julia Kay

Julia

I apologize for the delay in getting you this information. The species found in the Embarras River bottomlands are likely to be composed of the following species: swamp white oak, green ash, silver maple, bur oak, cottonwood, and sycamore. For more information on the Embarras River Basin, go to the link below.

http://dnr.state.il.us/orep/pfc/assessments/ERP/pagei.htm

Thanks

Roger Jansen District 14 NHB 1660 W Polk Ave Charleston, IL 61920 (217) 345-2420

From: Wright, Julia Kay [wrightj@illinois.edu] Sent: Tuesday, January 08, 2013 8:16 AM

To: Jansen, Roger

Subject: Trees along the east branch of the Embarras River

Dear Mr. Jansen,

Your name was given to me by Jim Payne (who was referred to me by Sandy Mason). Jim said that you are the heritage biologist for this area of the Embarras River. I am doing some research about the trees that grow along the east branch of the Embarras River just North of Villa Grove, Illinois. Could you please tell me what types of trees could be found along this branch and how tall I could expect them to grow?

Thank you very much for your time.

Julia Wright-Hall Villa Grove, IL 61956 217-832-9746

Trees along the Embarras

Jim Payne [jpayne@shout.net]

Sent: Friday, December 14, 2012 7:06 PM

To: Wright, Julia Kay

Attachments: Embarras Bluffs Species Li~1.xls (64 KB)

Hi Julia,

I steward three sites along the Embarras and Little Embarras rivers. These are north of Charleston, and south of Oakland. I've attached the species list from the largest site, Embarras Bluffs, which includes about half a mile of river frontage, including a nice floodplain and wetland.

Roger Jansen, Roger.jansen@illinois.gov, is the heritage biologist for the area, headquartered in Charleston. He probably has more complete data than I, encompassing most of the river's reach.

Let me know if I can be of further help!

Jim

Embarras Bluffs						
Species List						6/9/2012
Trees, Shrubs, and						
Woody Vines						
Family	Scientific Name	Common Name	Geoaddress	Notes	ည	Flowering Time
Acerace	Acer negundo L.	Box Elder				Apr - May
Acerace	Acer saccharum Marsh.	Sugar Maple				Apr - May
Anacardiaceae	Rhus glabra L.	Smooth Sumac				Jun - Jul
Anacardiaceae	Toxicodendron radicans (L.) Kuntze	Poison Ivy		Determine variety		May - Jul
Annonaceae	Asimina triloba (L.) Dunal	Pawpaw			4	Apr - May
Caesalpiniaceae	Cercis canadensis L.	Redbud				Apr - May
Caesalpiniaceae		Honey Locust				May - Jun
Caesalpiniaceae	Gymnocladus dioicus (L.) K. Koch				9	May - Jun
Caprifoliaceae	Sambucus canadensis L. var. canadensis					Jun - Jul
Caprifoliaceae	Symphoricarpos orbiculatus Moench.	Coral-berry				Jul - Sep
Caprifoliaceae	Viburnum prunifolium L.	Black Haw				Apr - Jun
Cornaceae	Cornus florida L.	Flowering Dogwood			S	Apr - Jun
,		Musclewood Tree,				
Corylaceae	Carpinus caroliniana Walt.	Blue Beech			9	Apr - May
Corylaceae	Corylus americana Walt.	Hazelnut			4	Mar - Apr
Corylaceae	Ostrya virginiana (Mill.) K. Koch	Hop Hornbeam				Apr - May
Cupressaceae	Juniperus virginiana L.	Red Cedar				ن
Ebenaceae	Diospyros virginiana L.	Persimmon		ID variant	2	May - Jun
Fagaceae	Quercus alba L.	White Oak				Apr - May
Fagaceae	Quercus imbricaria Michx.	Shingle Oak				Apr - May
Fagaceae	Quercus macrocarpa Michx.	Burr Oak				Apr - May
Fagaceae	Quercus rubra L.	Red Oak				Apr - May
Fagaceae	Quercus velutina Lam.	Black Oak				Apr - May
Grossulariaceae	Ribes missouriense Nutt.	Missouri Gooseberry				Mar - May
Hydrangeaceae	Hydrangea arborescens L.	Wild Hydrangea			. 9	Jun - Aug
Juglandaceae	Carya cordiformis (Wangenh.) K. Koch	Bitternut Hickory				May - Jun

Juglandaceae	Carya ovata (Mill.) K. Koch	Shagbark Hickory			Apr - May
Juglandaceae	Juglans nigra L.	Black Walnut			Apr - May
Lauraceae		Spicebush	Determine variety	S	Mar - May
Lauraceae	Sassafras albidum (Nutt.) Nees	Sassafras	Determine variety		Apr - May
Magnoliaceae	Liriodendron tulipfera L.	Tulip Tree		5 ,	Apr - May
Menispermaceae	Menispermum canadense L.	Moonseed			May - Jul
Moraceae	Morus alba L.*	White Mulberry			Apr - May
Oleaceae	Fraxinus pennsylvanica Marsh.	Green Ash		7	Apr - May
Platanaceae	Platanus occidentalus L.	Sycamore		7	Apr - May
Rosaceae	Crataegus mollis (Torr. & Gray) Scheele Red Haw	Red Haw			May
000000 2000000000000000000000000000000	Deninis constina Ehrh	Wild Block Chammy	Unique smell to		
Rosaceae	Rosa multiflora Thinh *	Multiflora Rose	mitched of twigs	7	May Inn
Rosaceae	Ruhus alleoheniensis Porter	Common Blackberry			May - Jun
	0		ID species. Collect		ima (mi
Rubiaceae	Cephalanthus sp.	Buttonbush	seed in November.	4	Jun - Aug
Salicaceae	Populus deltoides Marsh.	Eastern Cottonwood			Mar - May
Smilacaceae	Smilax sp.	Cathrier	Determine species		
Staphyleaceae	Staphylea trifolia L.	Bladdernut		5 /	Apr - May
Tiliaceae	Tilia americana L.	Basswood		-	May - Jul
Ulmaceae	Ulmus americana L.	American Elm		H	Feb - Apr
Ulmaceae	Ulmus rubra Muhl.	Slippery Elm		1	Feb - Apr
Vitaceae	Parthenocissus quinquefolia (L.) Planch.	Virginia Creeper		ī	Jun - Jul
Vitaceae	Vitis sp.	Grape	Determine species	4	May - Jul
* indicates a plant not native to Illinois.					
Of the species					
recorded, - are not native to Illinois.					

Based upon observations 2004 - 2006 by Bob Szafoni, Jim Payne, and Mary Kay Solecki Herbaceous Plants Family Apiaceae Apiaceae Apiaceae Apiaceae Apiaceae Arisaema dracontium (L.) Schott Araceae Arisaema dracontium (L.) Schott Araliaceae Araceae Araceae Arisaema dracontium (L.) Schott Araliaceae Araceae Araceae Araceae Aracean Arisaema tryphyllum (L.) Schott Araliaceae Araceae Araceae Araceae Araceae Araceae Araceae Araceae Arisaema tryphyllum (L.) Schott Araceae Araceae Araceae Araceae Araceae Araceae Araceae Araceae Araceae Arisaema tryphyllum (L.) Schott	N	Common Name Wild Chervil				
Si litz	N	ommon Name Vild Chervil				
3	8	ommon Name Vild Chervil				
	N N	ommon Name Vild Chervil				
	7	ommon Name Vild Chervil				
	N	/ild Chervil	Geoaddress	Notes	ည	Flowering Time
				ID variant		Apr - Jun
		Queen Anne's Lace				May - Oct
	ي					
	ي	Anise-root				Apr - Jun
	Q.	Common Black				4
		Snakeroot				May - Jun
		Green Dragon			4	May - Jun
		Jack-in-the-Pulpit			4	Apr - May
		Ginseng			7	Jun - Jul
	Λ	Wild Ginger		ID variant		Apr - May
4		Ebony Spleenwort		ID variant		May - Sep
Ageraina aiiissima (L.) K.M. King & H						
Asteraceae Robins	Δ	White Snakeroot				Jul - Sep
Asteraceae Ambrosia artemisiifolia L.	2	Common Ragweed				Aug - Oct
Asteraceae Ambrosia trifida L.	O	Giant Ragweed		ID variant		Jul - Oct
Asteraceae Antennaria sp.	P	Pussytoes	09550 85058	ID species		Apr - May
Asteraceae Aster sp.	V	Aster		ID species		
Asteraceae Erigeron sp.	Д	Daisy Fleabane		ID species		May - Nov
	P	Prairie Dock				Jun - Sep
Asteraceae Solidago canadensis L.	C	Canada Goldenrod				Jul - Sep
Asteraceae Solidago flexicaulis L.	Z	Zigzag Goldenrod			9	Jul - Sep
Asteraceae Solidago ulmifolia Muhl.	Щ	Elm-leaved Goldenrod			5	Jul - Nov
	0	Orange Jewelweed				Jun - Oct
		Yellow Jewelweed				Jun - Oct
		Blue Cohosh	;		8	Apr - May
Berberidaceae Podophyllum peltatum L.	2	Mayapple				Apr - Jun

Boraginaceae	Hackelia virginiana (L.) I.M. Johnston	Stickseed			Ju	Jun - Sep
Boraginaceae	Mertensia virginica (L.) Pers.	Bluebells			Σ	Mar - Jun
Boraginaceae	Myosotis verna Nutt.	Small Scorpion-grass		111111111111111111111111111111111111111	A	Apr - Jun
	Alliaria petiolata (Bieb.) Cavara &					
Brassicaceae	Grande*	Garlic Mustard			Σ	May - Jun
Brassicaceae	Arabis laevigata (Willd.) Poir.	Smooth Rock Cress			Σ	Mar - Aug
Brassicaceae	Dentaria laciniata Muhl.	Toothwort			Fe	Feb - May
Campanulaceae	Campanulastrum americanum (L.) Small American Bellflower	American Bellflower		ID variant	Ju	Jun - Nov
Caprifoliaceae	Lonicera reticulata Raf.	Yellow Honeysuckle			X	May - Jul
Caprifoliaceae	Triosteum sp.	Horse Gentian		ID species	Ai	Apr - Jul**
Caryophyllaceae	ia (L.) Cyrillo*	Common Chickweed	39.60957 088.05247		Fe	Feb - Dec
Commelinaceae	Tradescantia sp.	Spiderwort		ID species	Aı	Apr - Jun
Corylaceae	Corylus americana Walt.	Hazelnut			M	Mar - Apr
Cuscutaceae	Cuscuta sp.	Dodder		ID species		•
Cyperaceae	Carex sp.	Sedge				
Cyperaceae	Carex albursina Sheldon	White Bear Sedge			7 Ap	Apr - May
Cyperaceae		Gray's Sedge			9 Mg	May - Sep
Cyperaceae	Carex jamesii Schwein.	James' Sedge			Αŗ	Apr - May
Cyperaceae	Carex pensylvanica Lam.	Pennsylvania Sedge	09280 85515		Ar	Apr - May
Dioscoreaceae	alt.) J.F. Gmel.	Wild Yam		ID variant	Jui	Jun - Jul
	Polystichum acrostichoides (Michx.)					
Dryopteridaceae		Christmas Fern			Jui	Jun - Oct
Equiseteaceae	Equisetum arvense L.	Common Horsetail			Ap	Apr - Jun
Equiseteaceae	Equisetum sp.			Small, whorled branches		
4	Baptisia alba (L.) Vent var. macrophylla					
Fabaceae		White Wild Indigo			M	May - Aug
Fabaceae	Desmodium sp.	Tick Trefoil		ID species	Jut	Jun - Sep
Fumariaceae	Dicentra cucullaria (L.) Bernh.	Dutchman's Breeches			Mŝ	Mar - May
Sentions and	Hyncon carolinioneis Welt	American Columba				May - Jun
Communication	ait.	Aillei Icail Columno			90) 0	(occasional)
Geraniaceae	Geranium maculatum L.	Wild Geranium			Ap	Apr - Jun
Hydrophyllaceae	Hydrophyllum canadense L.	Broad-leaved Waterleaf			Ma	May - Jul

Lamiaceae	Monarda bradburiana Beck	Horse Raim				Anr Inn
ramacac	Moral ad of adole faria Door	Holse Dann				umr - ıdıv
				In ravine w/ wild		
Lamiaceae	Monarda fistulosa L.	Wild Bergamot	09455 85281	ginger, rattiesnake fern, sweet cicely		May - Aug
Lamiaceae	Scutellaria incana Biehler	Downy Skullcap	09407 85170	Upland	5	Jun - Sep
Tamionaga	Contallaria Intentificant	Mad dog Classions	70706 06406	Clearing at bottom of		100
Lamacac	ב יווי וחוכן וויוכן חובי	Mad-uog Shuileap	02220 02400	Idville		Jan - Oct
Lamiaceae	Scutellaria ovata Hill	Heart-leaved Skullcap		ID variant	2	May - Oct
Lamiaceae	Silene stellata (L.) Ait. f.	Starry Campion		ID variant	9	Jun - Oct
Lemnaceae	Lemna minor L.	Duckweed				
Liliaceae	Allium canadense L.	Wild Onion				May - Jul
Liliaceae	Allium tricoccum L.	Wild Leek				Jun - Jul
Liliaceae	Erythronium albidum Nutt.	Trout Lily				Apr - May
	Polygonatum commutatum (Schult.) A.					
Liliaceae	Dietr.	Solomon's-seal				Apr - Jun
Liliaceae	Smilacina sp.	False Solomon's Seal		ID species		Apr - Jun
Liliaceae	Trillium nivale Riddell	Snow Trillium	09176 85469		00	Mar - Apr
Liliaceae	Trillium recurvatum Beck	Purple Trillium		ID form	5	Mar - May
Liliaceae	Uvularia grandiflora Sm.	Yellow Beliwort			7	Apr - May
		Halberd-leaved Rose				
Malvaceae	Hibiscus laevis All.	Mallow			4	Jul - Oct
Onocleaceae	Onoclea sensibilis L.	Sensitive Fern			S	Jun - Oct
Ophioglossaceae	Botrychium sp.	Grape Fern		ID species		Sep - Nov
Ophioglossaceae	Botrychium virginianum (L.) Sw.	Rattlesnake Fern				Jun - Jul
		Common Adder's				
Ophioglossaceae	Ophioglossum vulgatum	Tongue			_	Apr - Jun
			01969 85426,			
Orchidaceae	Aplectrum hyemale (Willd.) Nutt.	Putty-root Orchid	09462 85193		7	May - Jun
Orchidaceae	Galearis spectabilis (L.) Raf.	Showy Orchis			7	Apr - Jun
Orchidaceae	Spiranthes ovalis Lindl.	Ladies' Tresses			∞ ∞	Sep - Oct
		One-flowered				
Orobanchaceae	Orobanche uniflora L.	Broomrape			∞	May - Jun
Oxalidaceae	Oxalis stricta L.	Yellow Wood Sorrel				May - Nov
Oxalidaceae	Oxalis violacea L.	Purple Oxalis			7	Apr - Jun
Papaveraceae	Sanguinaria canadensis L.	Bloodroot			5 1	Mar - Apr
						4

71.4-10	n//	7				()
rnytolaccaceae		rokeweed				Jul - Oct
Poaceae	um (Michx.) Yates	Sea Oats			4	Jul - Oct
Poaceae	Diarrhena americana	American Beakgrass				Jun - Sep
Poaceae	Elymus hystrix L.	Bottlebrush Grass		ID variant	S	Jun - Aug
Poaceae	ea L.	Reed Canary Grass	09466 85459	Is this adventive?		May - July
Poaceae	Phleum pratense L.*	Timothy				Jun - Aug
Poaceae		Canada Blue Grass				May - Aug
Polemoniaceae	Ssp. Laphamii	Common Phlox				Apr - Jun
Polemoniaceae		Garden Phlox				Jul - Sep
Portulacaceae	L.	Spring Beauty				Mar - Jun
Pteridaceae	Adiantum pedatum L.	Maidenhair Fern	09217 85292		9	Jun - Sep
,				shedding seed		
Ranunculaceae		Dolls Eyes		8/11/04	7	Apr - Jun
Ranunculaceae	Hepatica acutiloba DC.	Sharp-lobed Hepatica				Mar - May
		Small-flowered				
Ranunculaceae	Ranunculus abortivus L.	Crowfoot		ID variant		Apr - Jun
Ranunculaceae	Ranunculus septentrionalis Poir.	Marsh Buttercup		ID variant		Apr - Jul
Rosaceae	Agrimonia pubescens Wallr.	Soft Agrimony				Jul - Sep
Rosaceae	Potentilla simplex Michx.	Common Cinquefoil		ID variant		May - Jun
Rubiaceae	Gallum aparine L. var. aparine	Cleavers				May - Jul
Rubiaceae	Galium circaezans Michx.	Wild Licorice		ID variant		May - Jul
		Sweet-scented				
Rubiaceae	Galium triflorum Michx.	Bedstraw				May - Sep
Saururuaceae	Saururus cernuus L.	Lizard's Tail			2	May - Sep
Scrophulariaceae	Collinisia verna Nutt.	Blue-eyed Mary			2	Apr - Jun
		Winged Monkey				
Scrophulariaceae		Flower				Jun - Sep
Solanaceae	Solanum carolinense L.	Horse-nettle				Jun - Oct
	Thelypteris hexagonoptera (Michx.)		39.61254 088.05820 +/-			
Thelypteridaceae	Weatherby	Broad Beech Fern	30'		7	Jun - Sep
Urticaceae	anadensis (L.) Wedd.	Wood Nettle				Jun - Sep
Violaceae	Viola sororia Willd.	Wooly Blue Violet				Mar - May
Violaceae	Viola pubescens Ait.	() Yellow Violet		ID variant		Apr - May
	Cystopteris sp.	Fragile Fern		ID species		
The state of the s						

-

	Helianthus sp.	Sunflower			
		White Lettuce		ID species	
indicates a plant not native to Illinois.					
Of the species recorded, - are not native to Illinois.					
Based upon observations 2004 - 2006 by Bob Szafoni. Jim Payne.					
Mary Kay Solecki, and Jamie Ellis					
Birds					
Scientific Name	Common Name	Geoaddress	Notes		
			Conservation		
			Concern -		
	Acadian Flycatcher		Cornell Lab.		
	Barn Swallow				
	Barred Owl				
	Belted Kingfisher				
	Blue-Gray Gnatcatcher				
	Blue Jay				
	Bluebird				
	Brown Thrasher				
	Canada Goose				
	Cardinal				
	Carolina Chickadee				
	Carolina Wren				
	Catbird				
	Cowbird				
	Crow				

Conservation	Concern -	Cornell Lab.				Adult and	Juvenile at	wetland, 6/22-	25/2010										Probable - only	heard call, not	song								
		Warbier	Woodpecker	reo	Woodpecker				lawk	ckbird		ed Grosbeak	ed Swallow	ger	Ipiper	W		ager			hrush	nse	ıre	reo	ted Nuthatch	Vireo	ted Sparrow		
		Prothonotary Warbler	Red-Bellied Woodpecker	Red-Eyed Vireo	Red-Headed Woodpecker				Red-Tailed Hawk	Redwing Blackbird	Robin	Rose-Breasted Grosbeak	Rough-Winged Swallow	Scarlet Tanager	Solitary Sandpiper	Song Sparrow	Starling	Summer Tanager			Swainson's Thrush	Tufted Titmouse	Turkey Vulture	Warbling Vireo	White-Breasted Nuthatch	White-Eyed Vireo	White-Throated Sparrow	Wild Turkey	Wood Duck

			Total Care Color
			Colisci Validii
			Concern -
			Cornell Lab.
			David Mott
			confirmed
			nesting; adult
			feeding
	W/cod Thursh		fledgling 6/22-
	WOOL LIEUSII		25/2010.
			Conservation
			Concern -
	Yellow-billed Cuckoo		Cornell Lab.
	Yellow-Breasted Chat		
			Conservation
			Concern -
	Yellow-Throated Vireo		Cornell Lab.
	Yellow-Throated Warbler		
	Yellow Warbler		
Based upon observations			
by Jackie Wilen and			
Larry Thorsen 5-8-05,			
Larry & Ruth, David			
Mott 5/1/2010, 6/22-			
Butterflies			
Scientific Name	Common Name	Geoaddress	Notes
	Alfalfa Butterfly		
	Buckeye		
	Cabbage White		
	Cloudless Sulphur		
:	Common Sulphur		
	Eastern Tailed Blue		

,

			Three species	
	rolded-winged Skipper		observed	
	Hackberry Butterfly			
	Little Wood Satyr			
	Little Yellow			
	Monarch			
	Pearl Crescent			
	Pipevine Swallowtail			
	Question Mark			
	Red Admiral			
	Red-spotted Purple			
	Snout Butterfly			
	Spicebush Swallowtail			
	Spring Azure (Summer?)			
	Tiger Swallowtail			
	Variegated Fritillary			
Based upon observations				
made by David Mott				
Insects Other than				
Butterflies				
	c c			
Scientific Name	Common Name	Geoaddress	Notes	The second secon
			Several, in fine dust in white	
	Ant Lion		pole barn	
Mammals				
Scientific Name	Common Name	Geoaddress	Notes	
	Beaver			
	Coyote			

Gray Treefrog Gray Treefrog	itific Name Geoaddress Notes	iles	Fox Squirrel	Notes	Geoaddress	Fox Squirrel Whitetailed Deer Red Fox Common Name Ringneck Snake American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink Garter Snake Gray Treefrog	Vulpes vulpes L. Herptiles Scientific Name Diadophis punctatus
T control Times		American Name Geoaddress American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink Garter Snake Gray Treefrog Green Treefrog	Whitetailed Deer Red Fox Red Fox Common Name Common Name Geoaddress American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink Garter Snake Gray Treefrog Green Treefrog			Leopard Frog	
Graty Treefrog Green Treefrog		Common Name Geondatess	Whitetailed Deer Red Fox Common Name Geoarddress			Ringneck Snake American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink Garter Snake Gray Treefrog	Diadophis punctatus
Brown Snake Eastern Box Turtle Five-lined Skink	ĺ	Common Name Geoaddress	Whitetailed Deer Red Fox Common Name Geoaddress			Ringneck Snake American Toad Big Headed Skink	ophis punctatus
Common Name Geoaddress American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink	iles		Whitetailed Deer			Red Fox	s vulpes L.
Red Fox Common Name Common Name Geoaddress American Toad Big Headed Skink Brown Snake Eastern Box Turtle Five-lined Skink	lpes L.					Whitetailed Deer	

rw: rees along the Embarras Page 1 of 1

FW: Trees along the Embarras

Wright, Julia Kay

Sent:

Thursday, December 27, 2012 1:47 PM

To:

Larry Hall [iisteprs@frontier.com]; Jean Fisher [jeanniefisher@hotmail.com]

Attachments: Embarras Bluffs Species Li~1.xls (67 KB)

Here is the email and listing I got from Jim Payne.

----Original Message----

From: Jim Payne [mailto:jpayne@shout.net] Sent: Friday, December 14, 2012 7:06 PM

To: Wright, Julia Kay

Subject: Trees along the Embarras

Hi Julia,

I steward three sites along the Embarras and Little Embarras rivers. These are north of Charleston, and south of Oakland. I've attached the species list from the largest site, Embarras Bluffs, which includes about half a mile of river frontage, including a nice floodplain and wetland.

Roger Jansen, Roger.jansen@illinois.gov, is the heritage biologist for the area, headquartered in Charleston. He probably has more complete data than I, encompassing most of the river's reach.

Let me know if I can be of further help!

Jim

---email from Sandy Mason when I asked for something in writing from her---

HI Julia,

I am copying this to Jim Payne one of our Master Naturalist that is very familiar with the Embarras. I would think he could give you lots of info about the river's trees.

Sandy

Sandra L. Mason, UI Extension Educator Serving Champaign, Ford, Iroquois & Vermilion Counties 801 North Country Fair Drive Suite D Champaign, IL 61821 slmason@illinois.edu 217.333.7672 http://web.extension.illinois.edu/cfiv/homeowners/ Champaign County Zoning Board of Appeals c/o Mr. John Hall

REGARDING: Case 687-AM-11 and Case 688-S-RECEIVED

APR 1 5 2013

Dear Zoning Board Members,

Thank you for your service. We have already submitted much evidence at previous mentions on 7 DEPARTMEN various aspects of these cases. We respect your time and we appreciate your patience. In this (hopefully final) submission, we have selected only a few articles to highlight our concerns regarding this proposed landing area. These concerns are not simply speculative fears, but the attached documents further prove that imposing this RLA into the present landscape has real safety concerns and will be detrimental to the property values of the homes in the area.

SAFETY We have continually stated that safety is one of our major concerns regarding the positioning of the proposed Jones' RLA. According to the AOPA (Aircraft Owners and Pilot Association), Safety Advisor, "The 'simple' act of taking off or landing accounts for 50 percent of all general aviation (GA) accidents." (See attached article Mastering Takeoffs & Landings.) Mitigating factors that cause these accidents include wind, obstructions, and short or soft fields -- all things present in the proposed site plan for the proposed RLA and for which we have submitted evidence.

AOPA further states in their Interactive Accident Maps website (www.aopa.org/asf) that GA takeoff accidents average about one every other day -- one-sixth prove fatal. Accidents from bad landings average eight per week and unintended stalls also account for at least two accidents per week. (See attachments.) As you are aware, the Hall home is situated adjacent to the beginning/ ending of the proposed runway -- the location stated as the most dangerous.

TREES To further address the "do trees grow taller on the edge of the woods" question, we attach an email received from Sandy Mason (UI Extension Educator, Champaign) who states that trees "typically are smaller on the edges of woodlands because they are younger trees. Lack of competition leads to bigger trees. The edges of woodlands are highly disturbed areas where mowing/ plowing etc has historically occurred. Edge trees are often ones that have reseeded from existing trees or weedy trees from bird droppings so they are younger and therefore smaller."

This information agrees with the information previously submitted at the March 13, 2013, meeting from qualified experts that trees on the edge of the woods are shorter ONLY because they are still growing and the trees will continue to grow until they reach their mature height, which is regulated by the species of the tree. Thus, there is no scientific or natural reason to believe that the trees at the west end of the proposed runway will not continue to grow and perhaps be an impediment to safe aircraft landings.

TRAFFIC and WIND TURBULENCE Mr. Singleton has made an argument that our home is closer to the highway than it would be to the landing area. In another argument, he stated that the aircraft that the petitioner will be landing are LIGHTER than most of the traffic along Route 130. However, lighter planes are more likely to be affected by wind turbulence than any heavier ground-based vehicles. Everyone knows that Illinois is windy, especially out on the prairie. According to the attached pages from the FAA Pilot's Handbook of Aeronautical Knowledge, pgs. 11-7 state: "Convective currents close to the ground can affect a pilot's ability to control the aircraft." Page 11-11 states: "Wind shear can subject an aircraft to violent updrafts and downdrafts as well as abrupt changes to the horizontal movement of the aircraft." As you can see from the attached articles, a wind gust at just the wrong time, could deflect a landing plane into our living room. (We did not present the wind speed/gust information around Champaign County, but if needed for your final determination, we will obtain this information.) Also included is info regarding wind shear and the effect wind has on aircraft.

LOCATION This proposed RLA has been moved over, shifted back, lengthened, and shortened -but ALL of this is on paper only. These are ONLY imaginary lines. There are NO markings on the ground indicating where the wheels of an aircraft should touch down -- the whole field is mowed grass. Any plane is free to land closer to the Hall home or closer to the Bragg property or closer to the west tree line. The petitioner will not be the only pilot landing on this RLA.

PROPERTY VALUES As an apparent rebuttal to property value concerns, the petitioner submitted a document entitled *The Impact of Airport Noise on Residential Property Values: A Case Study of the Portland-Hillsboro Airport*. We find the reasoning behind submitting this document curious since this report and the accompanying references cited in it **support our claims** (and lends additional credibility to the letter from the reputable realtor/appraiser, Mr. Dan Cothern, of Keller Williams) that this RLA will have a **negative impact on the neighborhood property values**.

Below, are listed only a few quotes from the article submitted in the petitioner's packet by Mr. Singleton (see highlights in attached).

_ ine impact	of Airport Noise on Residential Property Values: A Case Study of the Portland-Hillsboro Airport.
Page 3	Most studies have concluded that aircraft noise decreases the value of residential property sale prices located near airports.
	Airport noise is an externality that is imposed onto property owners and generally on a permanent basis (Bell, 2001). For most people, noise is a significant issue
Page 4	Real estate law in most states requires sellers to reveal noise and other nuisance factors, including airports, so prospective buyers are warned. Realtors have reported cases where offers were withdrawn or lowered in the vicinity of airports as a result of airport activity (Kranser, 1997).
Page 28	Studies have shown that airport noise has a negative impact on residential property values.
Page 33	By accessing property tax revenue and the price and location of homes, Lane (1994) was able to estimate the effects of airport noise on property tax revenue. Lane concluded that all things remaining equal, the value of a house and lot increases by about 3.4 percent for every quarter of a mile the house is farther way from being directly underneath the flight track of the airport. The study also concluded that the value of a single family residential home increases by about \$17,784 for every quarter a mile it is farther away from being directly underneath a flight track. This study concluded that the airport's most adverse impacts occur in areas immediately surrounding the airport (Lane, 1994).

Also, documents cited in the article support the fact that airport proximity has a negative impact on property values. Attached are a couple of documented references:

Airport Diminution in Value Study, by Randall Bell states: "This study indicates that airport proximity consistently has a negative impact on value. This market data indicates that single family residences located in proximity to an airport are worth less than an otherwise similar property that is not located by an airport. This impact on value ranges from -15.1% to -42.6% and averages -27.4%."

The Impact of Airports on Home Values by Leonard Kranser states: "The mantra of real estate professionals is "location, location, location" in the choice of a neighborhood in which to live. No one willingly chooses to buy a home with "unpleasant" neighborhood elements, under a flight path, next to a freeway, down wind from a refinery or beneath power lines, unless they are enticed by an attractive price for the property."

AGRICULTURE vs CONSERVATION At the March 13, 2013, meeting the petitioner stated (although it appears not to be in the minutes), that he didn't need to grow any hay on the property around the proposed RLA, he said he had plenty of hay and (quoting from the minutes) "if his requests are denied he will be forced to put the land back into crop production and it will look just like the neighboring agricultural properties in row crop." We find it notable that the rezoning from CR to AG-1 will NOT be for *agricultural* purposes, nor will it be for *conservation* purposes. The rezoning will simply afford the petitioner the favor of landing his aircraft, in addition to his family flying in and any other aircraft that the petitioner invites to his RLA, not to mention the possibility of an aircraft in distress landing on the field. Rezoning this acreage for the sole reason of declaring it a dedicated landing strip removes it from the limited conservation acreage in Champaign County and (according to the petitioner's stated plan) also removes it from agriculture usage. This does not appear to be the best use of this acreage.

We respectfully ask that you please deny Case 687-AM-11 and Case 688-S-11.

Thank you.

Larry and Julie Hall, 177N CR 1600 E, Villa Grove, IL

Auia KHall

Page 2 of 2

p. 2 of 38

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APR 1 5 2013

RE: Trees information

Mason, Sandra Lynn

Sent: Monday, March 25, 2013 9:24 AM

To: Wright, Julia Kay

CHAMPAIGN CO. P & Z DEPARTMENT

Hi Julia, sorry for the delay in reply. Snowed in has its advantages. If I am understanding the scenario you set out, that really isn't how trees grow. They typically are smaller on the edges of woodlands because they are younger trees. Lack of competition leads to bigger trees. The edges of woodlands are highly disturbed areas where mowing/plowing etc has historically occurred. Edge trees are often ones that have reseeded from existing trees or weedy trees from bird droppings so they are younger and therefore smaller. You may want to contact Jim Payne ipayne@shout.net that volunteers there or someone more familiar with Embarrass River area. Hope this helps

Sandy

Sandra L. Mason, UI Extension Educator Serving Champaign, Ford, Iroquois & Vermilion Counties 801 North Country Fair Drive Suite D Champaign, IL 61821 slmason@illinois.edu 217.333.7672 http://web.extension.illinois.edu/cfiv/homeowners/

From: Wright, Julia Kay

Sent: Wednesday, March 13, 2013 10:28 AM

To: Mason, Sandra Lynn **Subject:** Trees information

Hi Sandy,

This may be an odd question, but could you please tell me whether trees that are at the edge of a wooded area, such as along the Embarrass River, would stop growing taller before reaching their mature height since they don't need to compete for sunlight with other trees?

Thanks for your attention.

Julia (Wright) Hall

SAFETY ADVISOR



Operations & Proficiency No. 6



The "simple" act of taking off or landing accounts for 50 percent of all general aviation accidents.

If there's one thing that student pilots, CFIs, and hightime veterans all have in common, it's a susceptibility to takeoff and landing mishaps.

Why do pilots have so much trouble with these two most fundamental flying skills? It's simple: Takeoffs and landings require us to operate fast. relatively fragile machines in close proximity to the ground. There's not much room for error, even under ideal circumstances. Throw in wind, obstructions, and short/soft fields and things just get worse.

Mastering takeoffs and landings requires attention to detail and a healthy respect for the limitations of airplane and pilot. What's the field elevation? The temperature? How long is the runway, and what's the wind speed/direction? Is the airplane heavy? Will you really be able to squeeze "book" performance out of a tired. 30-year-old trainer?

THE 50/50 SOLUTION

ASI recommends adding 50 percent to the POH takeoff or landing distance over a 50-foot obstacle. For example: If the distance over the obstacle requires 1,600 feet, add 800 feet (50 percent) for a safety distance of 2,400 feet.

SAFE PILOTS, SAFE SKIES.

PG. 1

WWW.AIRSAFETYINSTITUTE.ORG



The two checklists in this safety advisor are full of tips for mitigating the numerous risks associated with takeoffs and landings. As you read them, remember that the root cause of most accidents is poor judgment. Know the aircraft, the airport, and the environment... but most importantly, know when it's time for you to divert, go around, or stay on the ground.

to maintain airspeed and end up having stall/ spin accidents. Unless you're close to pattern altitude, or have already started a turn when the engine fails, it's safer to land straight ahead—i.e., within the area you can see out the windshield.

TAKEOFF & CLIMB

The "Impossible Turn": If the engine fails shortly after takeoff, should you try to turn around and land on the departure runway? The viability of the so-called "impossible turn" depends on the circumstances, but there are plenty of reasons to be wary. The maneuver requires substantial altitude and involves relatively aggressive maneuvering. Taken by surprise, pilots often fail



FLIGHT ENVIRONMENT	RISK FACTOR	RISK MANAGEMENT
☑ Runway Length	"Short" runway.	· 50/50 solution (see pg. 1). · Use all available runway.
☑ Density Altitude	High density altitude.	 Fly in cooler temperatures. Decrease fuel and/or cargo. Use longer runways. Avoid runways with obstacles.
☑ Obstructions	Increased climb angle. Obstructions may cause turbulence.	 Maintain Vx until clear of obstacles. Then maintain Vy.
☑ Wind	Loss of control. Tailwind will increase runway length needed.	 Deflect ailerons into the wind. Too much wind? Use another runway. Use a higher rotation speed. Avoid tailwinds unless you have no other option (example: one-way runway)
☑ Runway Slope	Taking off uphill.	 Usually best to takeoff downhill. Risks vary with wind, runway slope, terrain. Generally requires more runway. Acceleration will be slower. May be difficult to out-climb terrain. Talk to local pilots or airport manager.
☑ Soft or Contaminated	Soft. Slush or snow.	 Perform a soft-field takeoff. Keep weight off the nosewheel. Transition from taxi to takeoff without stopping. Once airborne, accelerate in ground effect before climb out.
☑ Heavy Aircraft	Increased takeoff roll and reduced climb.	 Use a longer runway, especially with high density altitude,
☑ Night	Decreased visibility. Disorientation.	Stay night proficient. Avoid short runways at night.



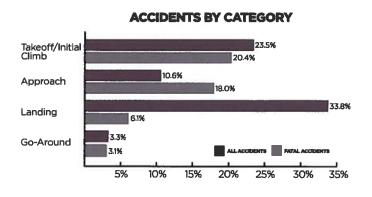
APPROACH & LANDING

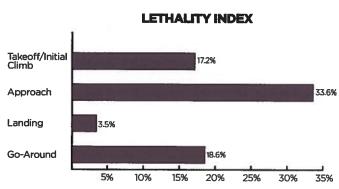
Going Around: If you have a problem during approach or landing, there's almost always a simple solution: Go around! It's far better to make another trip around the pattern than to push ahead and risk a runway overshoot or loss of control. Unfortunately, a lot of pilots seem to forget that it's an option, and end up having accidents they could easily have avoided. That said, there are some risks involved with go-arounds. Especially at low altitudes and airspeeds, with flaps down, going around can be a "touchy" maneuver: If you don't feel comfortable, get some practice with a CFI in the right seat.

FLIGHT ENVIRONMENT	RISK FACTOR	RISK MANAGEMENT
☑ Runway Length	"Short" runway.	 50/50 solution (see pg. 1). Configure the aircraft for a short-field landing. Use aggressive braking.
☑ Density Altitude	High density altitude.	 Decreases performance during a go-around. Increases landing distance.
☑ Obstructions	Short runway.	50/50 solution (see page 1).Maintain target speed.Use short-field configuration.
☑ Wind	Loss of control.	Deflect ailerons into the wind.Crab or slip on approach.Too much wind? Use another runway.
	Gusty conditions.	\cdot Add 1/2 the gust factor to your airspeed.
	Tailwind.	 Avoid tailwinds unless you have no other option (example: one-way runway.) Under some conditions, airport may be unusable.
☑ Runway Slope	Landing downhill.	 Usually best to land uphill. Risks vary with wind and runway slope. Generally requires more runway. Under some conditions, airports may be unusable. Talk to local pilots or airport manager.
☑ Soft or Contaminated	Soft. Slush or snow.	 Keep weight off the nosewheel. Keep moving until clear of the runway.
☑ Heavy Aircraft	Increased landing distance.	 Use a longer runway, especially with high density altitude.
☑ Night	Decreased visibility. Disorientation. Optical illusions.	 Stay night proficient. Avoid short runways at night. Use runways equipped with visual or electronic glideslope indicators.

TAKEOFF & LANDING ACCIDENTS

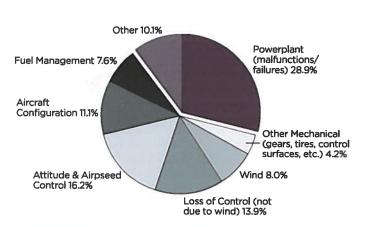
2000-2009

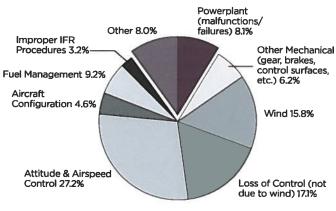




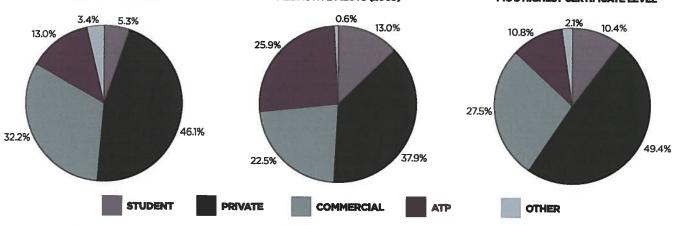
TAKEOFF & INITIAL CLIMB ACCIDENT CAUSES

APPROACH, LANDING, & GO-AROUND ACCIDENT CAUSES





TAKEOFF & INITIAL CLIMB PIC'S HIGHEST CERTIFICATE LEVEL DISTRIBUTION OF CERTIFICATE LEVELS APPROACH, LANDING & GO-AROUND ALL ACTIVE PILOTS (2009) PIC'S HIGHEST CERTIFICATE LEVEL





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AOPA



Select Map: Takeoff

Date Range: * 1 Year, 01/13/2012 - 01/13/2013 Go

You can filter the accidents below by a specific Manufacturer/Model:

Show All

*Accident reports are not entered into the ASP database until 1-2 weeks after the National Transportation Safety Board issues its preliminary report. Note: Accidents included on the basis of preliminary reports may later be reclassified after final determination of probable cause.



Taking off might seem like the easiest part of flying — but GA takeoff accidents average about one every other day. Whether uphill, downwind, overweight, or underskilled, about one-sixth of these mistakes prove fatal. Scroll over the points to read more about individual accidents. Then click here for tips on how (and when) to make it off the runway.





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AOPA



Select Map: Landing

Date Range: * 1 Year, 01/13/2012 - 01/13/2013 Go

You can filter the accidents below by a specific Manufacturer/Model:

Show All

*Accident reports are not entered into the ASF database until 1-s weeks after the National Transportation Safety Board issues its preliminary report. Note: Accidents included on the basis of preliminary reports may later be reclassified after final determination of probable cause.



Bad landings are the most common type of GA accident with an average of eight per week. Some are due to poor judgment, but many reflect a lack of basic stick-and-rudder airmanship. Scroll over the points to read more about individual accidents. Then click here for tips on how to avoid making the same mistakes.





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http://www.aopa.org/asf/ntsb/maps.cfm?method=map&mapNumbe... 4/13/2013

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Select Map: Stall/Spin

Date Range: * 1 Year, 01/13/2012 - 01/13/2013

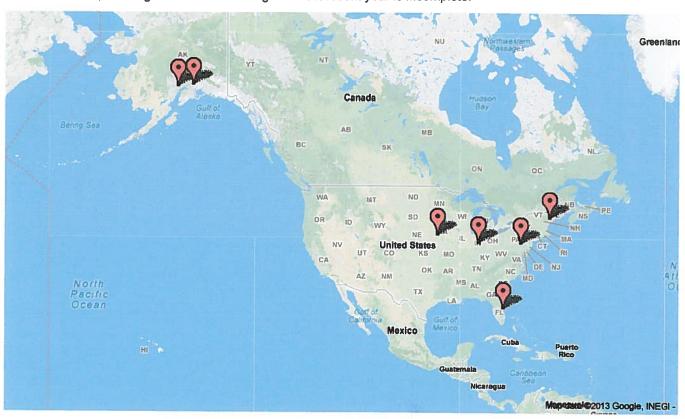
You can filter the accidents below by a specific Manufacturer/Model:

Show All

*Accident reports are not entered into the ASF database until 1-2 weeks after the National Transportation Safety Board issues its preliminary report. Note: Accidents included on the basis of preliminary reports may later be reclassified after final determination of probable cause.

The skidding turn from base to final may be the classic set-up, but unintended stalls also cause accidents during takeoffs, landings, and go-arounds, simulated engine failures, and buzzing attempts. At low altitude, there may not be room to recover from even a coordinated wings-level stall, and with perfect technique spin recovery can still require at least a thousand feet. Almost two airplanes a week are lost when their pilots unexpectedly exceed the critical angle of attack, and more than 40% of these crashes are fatal. You can read the details of individual accidents by scrolling over the points — then click here for a refresher on safe maneuvering, or here to take the ASI's on-line aerodynamics course.

*Identification of stall/spin accidents is usually based on the National Transportation Safety Board's final report, which may not be issued for more than a year after the accident itself. As a result, coverage of accidents during the most recent year is incomplete.





Non Fatal



Fatal

" FAA PILOTS HANDBOOK of AERONAUTICAL KNOWLEDGE

percent is life sustaining, atmospheric oxygen. At sea level, atmospheric pressure is great enough to support normal growth, activity, and life. By 18,000 feet, the partial pressure of oxygen is reduced and adversely affects the normal activities and functions of the human body.

The reactions of the average person become impaired at an altitude of about 10,000 feet, but for some people impairment can occur at an altitude as low as 5,000 feet. The physiological reactions to hypoxia or oxygen deprivation are insidious and affect people in different ways. These symptoms range from mild disorientation to total incapacitation, depending on body tolerance and altitude. Supplemental oxygen or cabin pressurization systems help pilots fly at higher altitudes and overcome the effects of oxygen deprivation.

Wind and Currents

Air flows from areas of high pressure into areas of low pressure because air always seeks out lower pressure. Air pressure, temperature changes, and the Coriolis force work in combination to create two kinds of motion in the atmosphere—vertical movement of ascending and descending currents, and horizontal movement in the form of wind. Currents and winds are important as they affect takeoff, landing, and cruise flight operations. Most importantly, currents and winds or atmospheric circulation cause weather changes.

Wind Patterns

In the Northern Hemisphere, the flow of air from areas of high to low pressure is deflected to the right and produces a clockwise circulation around an area of high pressure. This is known as anticyclonic circulation. The opposite is true of low-pressure areas; the air flows toward a low and is deflected to create a counterclockwise or cyclonic circulation. [Figure 11-10]

High pressure systems are generally areas of dry, stable, descending air. Good weather is typically associated with high pressure systems for this reason. Conversely, air flows into a low pressure area to replace rising air. This air tends to be unstable, and usually brings increasing cloudiness and precipitation. Thus, bad weather is commonly associated with areas of low pressure.

A good understanding of high and low pressure wind patterns can be of great help when planning a flight, because a pilot can take advantage of beneficial tailwinds. [Figure 11-11] When planning a flight from west to east, favorable winds would be encountered along the northern side of a high pressure system or the southern side of a low pressure system. On the return flight, the most favorable winds would be along the southern side of the same high pressure system or the northern side of a low pressure system. An added advantage



Figure 11-10. Circulation pattern about areas of high and low pressure.

is a better understanding of what type of weather to expect in a given area along a route of flight based on the prevailing areas of highs and lows.

While the theory of circulation and wind patterns is accurate for large scale atmospheric circulation, it does not take into account changes to the circulation on a local scale. Local conditions, geological features, and other anomalies can change the wind direction and speed close to the Earth's surface.

Convective Currents

Different surfaces radiate heat in varying amounts. Plowed ground, rocks, sand, and barren land give off a large amount of heat; water, trees, and other areas of vegetation tend to absorb and retain heat. The resulting uneven heating of the air creates small areas of local circulation called convective currents.

Convective currents cause the bumpy, turbulent air sometimes experienced when flying at lower altitudes during warmer weather. On a low altitude flight over varying surfaces, updrafts are likely to occur over pavement or barren places, and downdrafts often occur over water or expansive areas of vegetation like a group of trees. Typically, these turbulent conditions can be avoided by flying at higher altitudes, even above cumulus cloud layers. [Figure 11-12]

Convective currents are particularly noticeable in areas with a land mass directly adjacent to a large body of water, such as an ocean, large lake, or other appreciable area of water. During the day, land heats faster than water, so the air over the land becomes warmer and less dense. It rises and is replaced

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Figure 11-11. Favorable winds near a high pressure system.

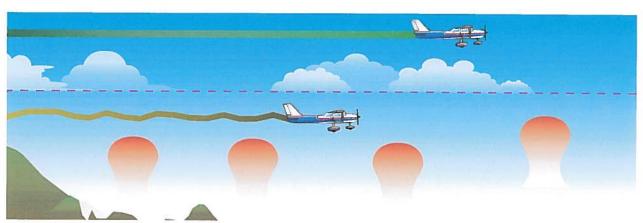


Figure 11-12. Convective turbulence avoidance.

by cooler, denser air flowing in from over the water. This causes an onshore wind, called a sea breeze. Conversely, at night land cools faster than water, as does the corresponding air. In this case, the warmer air over the water rises and is replaced by the cooler, denser air from the land, creating an offshore wind called a land breeze. This reverses the local wind circulation pattern. Convective currents can occur anywhere there is an uneven heating of the Earth's surface. [Figure 11-13]



Convective currents close to the ground can affect a pilot's ability to control the aircraft. For example, on final approach, the rising air from terrain devoid of vegetation sometimes produces a ballooning effect that can cause a pilot to overshoot the intended landing spot. On the other hand, an approach over a large body of water or an area of thick vegetation tends to create a sinking effect that can cause an unwary pilot to land short of the intended landing spot. [Figure 11-14]

Effect of Obstructions on Wind

Another atmospheric hazard exists that can create problems for pilots. Obstructions on the ground affect the flow of wind and can be an unseen danger. Ground topography and large buildings can break up the flow of the wind and create wind gusts that change rapidly in direction and speed. These obstructions range from manmade structures like hangars to large natural obstructions, such as mountains, bluffs, or canyons. It is especially important to be vigilant when flying in or out of airports that have large buildings or natural obstructions located near the runway. [Figure 11-15]

The intensity of the turbulence associated with ground obstructions depends on the size of the obstacle and the primary velocity of the wind. This can affect the takeoff and landing performance of any aircraft and can present a very serious hazard. During the landing phase of flight, an aircraft



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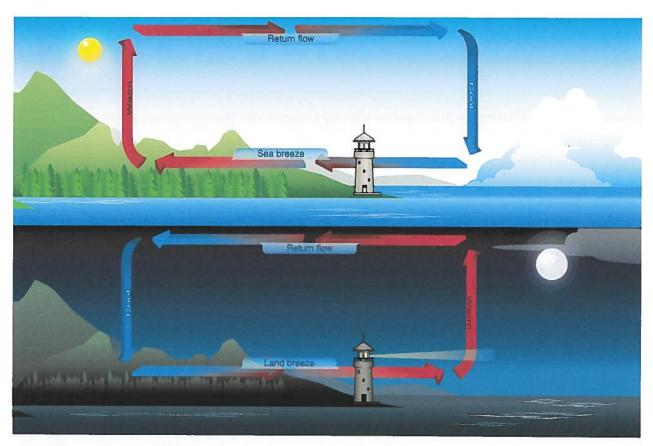


Figure 11-13. Sea breeze and land breeze wind circulation patterns.

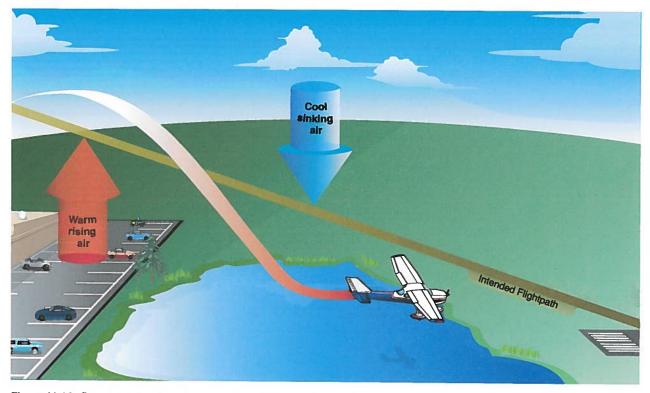


Figure 11-14. Currents generated by varying surface conditions.



Figure 11-15. Turbulence caused by manmade obstructions.



may "drop in" due to the turbulent air and be too low to clear obstacles during the approach.

This same condition is even more noticeable when flying in mountainous regions. [Figure 11-16] While the wind flows smoothly up the windward side of the mountain and the upward currents help to carry an aircraft over the peak of the mountain, the wind on the leeward side does not act in a similar manner. As the air flows down the leeward side of the mountain, the air follows the contour of the terrain and is increasingly turbulent. This tends to push an aircraft into

the side of a mountain. The stronger the wind, the greater the downward pressure and turbulence become.

Due to the effect terrain has on the wind in valleys or canyons, downdrafts can be severe. Before conducting a flight in or near mountainous terrain, it is helpful for a pilot unfamiliar with a mountainous area to get a checkout with a mountain qualified flight instructor.

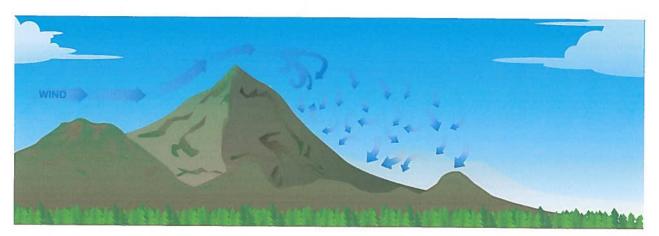


Figure 11-16. Turbulence in mountainous regions.

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Low-Level Wind Shear



Wind shear is a sudden, drastic change in wind speed and/or direction over a very small area. Wind shear can subject an aircraft to violent updrafts and downdrafts, as well as abrupt changes to the horizontal movement of the aircraft. While wind shear can occur at any altitude, low-level wind shear is especially hazardous due to the proximity of an aircraft to the ground. Directional wind changes of 180° and speed changes of 50 knots or more are associated with low-level wind shear. Low-level wind shear is commonly associated with passing frontal systems, thunderstorms, and temperature inversions with strong upper level winds (greater than 25 knots).

Wind shear is dangerous to an aircraft for several reasons. The rapid changes in wind direction and velocity change the wind's relation to the aircraft disrupting the normal flight attitude and performance of the aircraft. During a wind shear situation, the effects can be subtle or very dramatic depending on wind speed and direction of change. For example, a tailwind that quickly changes to a headwind causes an increase in airspeed and performance. Conversely, when a headwind changes to a tailwind, the airspeed rapidly decreases and there is a corresponding decrease in performance. In either case, a pilot must be prepared to react immediately to the changes to maintain control of the aircraft.

In general, the most severe type of low-level wind shear is associated with convective precipitation or rain from thunderstorms. One critical type of shear associated with convective precipitation is known as a microburst. A typical microburst occurs in a space of less than one mile horizontally and within 1,000 feet vertically. The lifespan of a microburst is about 15 minutes during which it can produce downdrafts of up to 6,000 feet per minute (fpm). It can also produce a

hazardous wind direction change of 45 degrees or more, in a matter of seconds.

When encountered close to the ground, these excessive downdrafts and rapid changes in wind direction can produce a situation in which it is difficult to control the aircraft. [Figure 11-17] During an inadvertent takeoff into a microburst, the plane first experiences a performance-increasing headwind (1), followed by performance-decreasing downdrafts (2). Then, the wind rapidly shears to a tailwind (3), and can result in terrain impact or flight dangerously close to the ground (4).

Microbursts are often difficult to detect because they occur in relatively confined areas. In an effort to warn pilots of low-level wind shear, alert systems have been installed at several airports around the country. A series of anemometers, placed around the airport, form a net to detect changes in wind speeds. When wind speeds differ by more than 15 knots, a warning for wind shear is given to pilots. This system is known as the low-level wind shear alert system (LLWAS).

It is important to remember that wind shear can affect any flight and any pilot at any altitude. While wind shear may be reported, it often remains undetected and is a silent danger to aviation. Always be alert to the possibility of wind shear, especially when flying in and around thunderstorms and frontal systems.

Wind and Pressure Representation on Surface Weather Maps

Surface weather maps provide information about fronts, areas of high and low pressure, and surface winds and pressures for each station. This type of weather map allows pilots to

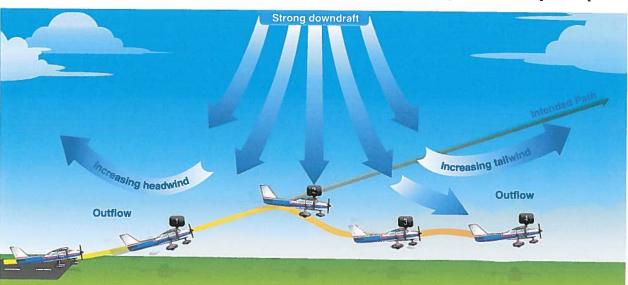


Figure 11-17. Effects of a microburst wind.

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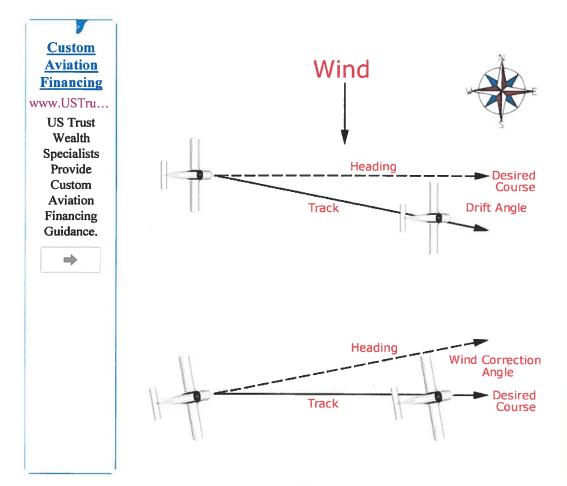
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Drift is caused by the <u>wind effect</u> on an aircraft and is defined as the angle between the aircraft heading and the aircraft track.¹

The direction in which an aircraft is pointed is called the heading. The actual path in which an aircraft travels over the ground is called the track. If an aircraft is flying straight into the wind, the aircraft true (geographical) course is calculated to be the same as the aircraft track.

However, if the wind is coming at an aircraft from an angle (crosswind), the track and desired course will deviate. The angle between the desired course and the track is known as the *drift* angle. In order to maintain the aircraft track on the desired course, the heading must be corrected left or right, depending on the direction of the crosswind.

If a crosswind is coming towards an aircraft from the left, the aircraft will drift to the right of the desired course. In order to counteract for drift, the aircraft must be turned to the left or into the wind. This is known as the wind correction angle and is expressed in terms of degrees.

End Notes:

1. AC-61-23A, Pilot's Handbook of Aeronautical Knowledge. (Washington, D.C.: Department of Transportation, Federal Aviation Administration, 1971). 76.

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Ads by Google Wind Effect CHAMPAIGN CO. P & Z DE Wind Power ▶ Wind Loads Home Page Theory Index ▶ Wind Speed 10 mph wind **Aircraft Ouality Pre-**Hangar **Owned Sale** www.BlueRi... lexusofpeoria... **Desired Course** In-floor Radiant Prices starting Heating. Free 10 miles at \$9,998 Free Design Service. History Reports mb. 100 miles During flight, one of the main considerations that will affect an aircraft is the motion of the wind. Referred to as wind effect, the speed and direction of the wind will alter the progress of any aircraft in flight. Although an aircraft has its own means of propulsion, the pilot must compensate for the wind speed and direction, in order for an aircraft to maintain the desired course. If we were to take a simple balloon, with no means of propulsion, and let it float freely in the air, the balloon will drift at the same speed and direction in which the wind is moving. If the air is moving at 10 mph in a southerly direction, after one hour, the balloon will drift 10 miles south. Now if we were to fly an airplane straight and level at 100 mph for one hour heading due east, the aircraft will be 100 miles east of its starting point after one hour, but it will also drift south 10 miles (the same as the balloon), if the pilot does not correct for the wind. When the wind is moving towards an aircraft from an angle, this will cause what is referred to as wind drift. For more information on this topic, refer to the page on wind drift. 10 mph wind-

Again if we were to take the same balloon, (with no means of propulsion, and let it float freely in the air), with the air moving at 10 mph in an easterly direction, after one hour, the balloon will drift 10 miles east. Now if we were to fly an aircraft at 100 mph for one hour, heading due east, the aircraft will be a distance of 110 miles east of its starting point. The aircraft was again affected by the wind just as the balloon was. The aircraft flew 100 mph under its own power, but it also

100 miles

90 miles

■ 10 miles

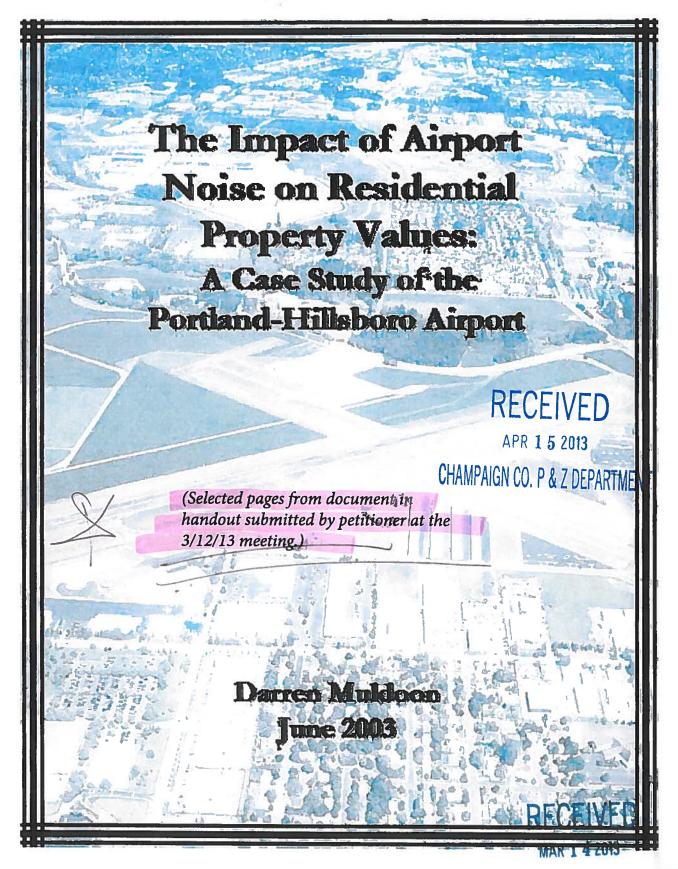
was able to gain an additional 10 miles in distance, because it was carried along by the wind, that was moving as the same direction as the aircraft. This is called a *tailwind*.

If the aircraft were to fly west under the same conditions, after one hour the aircraft would have flown only a distance of 90 miles. This time the aircraft was flying directly into the wind and the wind speed is subtracted from the aircraft speed. In this case the aircraft is said to be flying into a *headwind*.

When a headwind is subtracted or a tailwind is added to the speed of an airplane, this is called the wind component and will affect only the ground speed and not the actual airspeed of the aircraft. In this example, the airspeed will always read 100 mph, but if the aircraft is affected by a tailwind or headwind component, we must add or subtract the wind speed to find the actual progress or *ground speed* of the aircraft. For instructions on how to calculate this, refer to the page on *ground speed*.

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ABSTRACT

This work builds on previous studies researching airport noise and residential property values. The hedonic price method is used to explore the relationship between residential property values and airport noise in the vicinity of the Portland-Hillsboro Airport, a general aviation airport in Hillsboro, Oregon. Controlling for the year the property sold, empirical results suggest that there is no statistically significant negative relationship between airport noise and residential property values.

INTRODUCTION

A number of studies have examined the relationship between airport noise and residential property values. Several studies provide data on an estimated percentage loss in residential real estate values due to airport noise of varying intensity. Most studies have concluded that aircraft noise decreases the value of residential property sale prices located near airports.

While previous studies analyzed large commercial airports, little research has been completed for smaller general aviation airports. This study uses the hedonic pricing technique to determine the impact of both airport noise and the proximity to the airport on residential property values in the vicinity of the Portland-Hillsboro Airport in Hillsboro, Oregon.

There are hundreds of detrimental conditions (DCs) that may impact property market values. Airport noise is an externality that is imposed onto property owners and generally on a permanent basis (Bell 2001). For most people, noise is a significant issue and there is a segment of the population that will not live under a flight path. At the other extreme, there is a certain segment of the population that will purchase a property close to an airport if enticed by a reduced property price. In the middle of the spectrum are the people that own or purchase property in the vicinity of an airport that is impacted by airport noise. Since this study focuses on property sale values near an airport, the results may indicate the willingness to pay of people in the middle of the spectrum for residential property near an airport.

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Relative to many other detrimental conditions such as environmental contamination and geotechnical issues, airport noise is more straightforward to study and assess (Bell, 1997). The most fundamental aspect of real estate valuation studies is that conclusions must be based upon market data. In very few cases will the market value be significantly less than the assessed value since the property owner has the right to appeal any such determination. Real estate law in most states requires sellers to reveal noise and other nuisance factors,

Real estate law in most states requires sellers to reveal noise and other nuisance factors, including airports, so prospective buyers are warned. Realtors have reported cases where

offers were withdrawn or lowered in the vicinity of airports as a result of airport activity

(Kranser, 1997). Actual market value is the statistic that is most impacted by airport noise.

If an airport were nonpolluting, land rentals would be expected to decline with increased distance from the airport, and proximity to an airport may have certain positive effects on residential property values. These effects may include transportation network improvements, accessibility to jobs, and reduction in travel costs. Because of the positive and negative effects, the larger the airport, the more affect these effects will have on surrounding properties. Therefore, the larger the airport, the net effect on housing may not be negative because of the accessibility to jobs and other factors (Crowley, 1973). Employment opportunities exist at airport sites as well as commercial and industrial facilities that develop in the vicinity of an airport. For individuals that might work at or near an airport, or use the airport for travel, the benefits of proximity can be reflected in property values. Therefore, the net effect of property values can be positive or negative. Failure to account for accessibility to an airport could lead to bias in the hedonic estimated price for airport noise. Most people do not use general aviation airports travel, so accessibility is not a positive factor for general aviations.



Since an airport produces transport services as well as air and noise pollution, it is reasonable to expect external economies for industrial/commercial use and external diseconomies for residential use. Another factor in studying the impact of airports is the question of whether property values are significantly less for non-residential purposes; however, it is difficult to obtain data on commercial/industrial sales on the same basis as on residential because of difficulties in determining precisely what was sold and obtaining data

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LITERATURE REVIEW



The presence of aircraft noise is one of many considerations the consumer must evaluate in buying or selling a residence. Researchers have been careful to consider other effects on sale prices and to normalize their influences in research studies. Although there are many factors that must be considered when evaluating home values, nearly all research conducted in this area found negative effects from aviation noise. Given differences in statistical methods, samples, time periods, and urban locations, empirical studies have not produced a singular value for the effects of airport noise on property values. With the number of various noise measurement methods available, no single standard methodology exists, adding to the complexity of comparing previous studies. In the context of various methods, consistent themes and correlations emerge. In general, studies have shown that airport noise has a negative impact on residential property values. This section reports on those studies.



Some have speculated that the convenience and economic revenues from an airport serve to offset any diminution in value; however, nothing in the body of published literature supports this notion (Bell, 1994). Approximately six million Americans currently reside on 900,000 acres of land exposed to levels of aircraft noise that creates a significant annoyance for residents. Over 600,000 Americans reside in areas that are severely impacted by aircraft noise (DNL 55+) (Bell, 2001). Despite the magnitude of noise problems, no single or universal criterion defines a "noisy" airport and there is no preferred methodology to study the problem (Booz-Allen & Hamilton, 1994). Additionally, there are over 200 types of variables that impact real estate values, such as the presence and size of a garage, air conditioning, and heating, so each study uses a different combination of conditions (Bell, 1997).



Airports may depress residential property values in two ways. First, the airport's operations may depress property values from the *proximity to an airport's runway* below the level real estate markets would produce if the airport did not exist. Therefore, if a single-family residence located in the proximity to an airport were physically transported to an identical location on an identical lot in a community of identical status and prestige but elsewhere in



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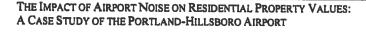
the region, its value would increase (Lane, 1994). The amount of the increase represents the depression in real estate value caused by the proximity to the airport.

A second way in which an airport may impact the value of real estate is the variation in value among properties caused by their *proximity to the airport's flight paths* for arriving and departing aircraft. This phenomenon is usually referred to as the "shadow effect", the noise pollution, visual pollution, possible air quality pollution, and the degraded environment for human habitat caused by living under low flying aircraft (Lane, 1994). While tremendous economic benefits and revenue clearly are associated with a large airport, studies conclude that those under or nearby the flight path tend to suffer a net negative impact (Bell, 1997).

Most studies of direct adverse impacts of airports have concentrated on measuring noise impacts on property values and proximity to the airport's flight paths as opposed to proximity near an airport. These studies employ a cross-section of property value data along with information on characteristics of housing and some measure of aircraft noise exposure. The most commonly used noise measure in published literature is the Noise Exposure Forecast (NEF). The NEF is the total noise exposure produced at a given point may be viewed as the sum of noise levels produced by different aircraft flying different flight paths. When summed on an energy basis over all aircraft types and flight paths, noise exposure is a function of the average perceived noise level, time of day, and number of operations (Bell, 1997). The primary noise criterion to describe the existing noise environment is the Decibel Noise Level (DNL) a noise measure that other published studies have examined in place of NEF.

Early studies used census data as a primary data resource to estimate the impacts of airport noise on residential property values. Aircraft noise impacting residential properties began in the 1960's with suburbanization and airport expansion. Table 5 summarizes the impact to property values for aircraft noise studies in 1960 and 1970 at several major airports.







DARREN MULDOON

to 0.74 percent for San Diego (Nelson, 1985). Nelson also concluded in a separate case study of Atlanta Hartsfield International Airport a property depreciation of 0.67 percent per decibel (Nelson, 1985).

A study prepared for the Port of Seattle in 1994 examined noise effects by comparing the assessed values of 32 residences located within the Seattle-Tacoma International "Noise Remedy Area" boundary. The study compared 16 residences that were within the Noise Remedy Area and 16 other residences that were outside the Noise Remedy Area boundary (Shapiro, 1994). The study incorporated variables such as the area of the lot, the size of the house, the number of bedrooms and bathrooms, and the city in which the house was located. The study concluded that neither the existence nor the magnitude of any general effect on rates of appreciation of property values from airport noise was demonstrated.

An additional study on noise impacts in the Seattle area in 1994 funded by a grant from the State of Washington found that the proposed expansion of Seattle-Tacoma International Airport would cost five nearby cities \$500 million in total property values and \$22 million in real estate tax revenue. This study also found based on empirical evidence that a housing unit in the immediate vicinity of the airport would sell for 10.1 percent more if it were located elsewhere. By accessing property tax revenue and the price and location of homes. Lane (1994) was able to estimate the effects of airport noise on property tax revenue. Lane concluded that all things remaining equal, the value of a house and lot increases by about 3.4 percent for every quarter of a mile the house is farther way from being directly underneath the flight track of the airport. The study also concluded that the value of a single family residential home increases by about \$17,784 for every quarter a mile it is farther away from being directly underneath a flight track. This study concluded that the airport's most adverse impacts occur in areas immediately surrounding the airport (Lane, 1994).

In an economic analysis based on empirical evidence of a conversion of a former military base to a commercial airport in Orange County, California, the impact of noise was determined to reduce the actual market value of real estate owned by residents and businesses in Orange County by \$1.1 billion to \$3.5 billion. This study was similar to

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effects (noise, air pollution) of general aviation airports is normally not considered when purchasing property. Most consumers do not use general aviation airports and are likely unaware of the negative environmental effects that a general aviation airport may cause. Therefore, the presence of the airport and the effects of the airport may be unknown when a buyer purchases a property. This theory may have influenced the results in this study. While many know the location of PDX in the Portland area and the associated noise effects from the airport's operations, the Portland-Hillsboro Airport serves a smaller percentage of people and likely does not heavily influence the price a buyer is willing to pay for a property; however, as Hillsboro continues to grow with development steered towards the airport due to decreased land supply in the Portland metropolitan area, the effects of noise on property values may become an increasing problem with residents and therefore may affect sale prices of residential property near the airport and its flight tracks.

CONCLUSION



There have been a number of studies examining the relationship between airport noise and residential property values. No published research has studied noise and property values near general aviation airports. Reviewed literature indicates that the impact of noise from practically all studied airports on residential properties was universally negative on residential property market values under or near a flight corridor and near the airport's runway. While more people will likely choose to not live in a home that is impacted by airport noise than the population that would accept airport noise, the results from this study indicate that the sale prices of homes are not affected by airport operations and aircraft noise from a general aviation airport.

The hedonic pricing technique is used in this study to determine the impact that airport noise and proximity to the airport have on residential property values in the vicinity of the Portland-Hillsboro Airport in Hillsboro, Oregon. This report incorporated distance from the airport's runways and distance from the airport's flight tracks. This study concluded that sale prices of homes are not significantly affected with increased noise level, decreasing distance from the airport, and decreasing distance from the airport's flight tracks. Sale

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prices are statistically higher with increasing distance from the airport's runways. The findings of this report indicate that noise is not main the factor of decreasing property values with decreased distance from the airport's runways.

Prior studies indicate that the price per decibel of noise is usually between 0.4 percent to 1.1 percent (Nelson, 1980). This study indicated a decreased price with increasing noise level, but unlike other studies, the noise value per decibel coefficient is not statistically significant. Other studies concluded that the disamenity value associated with a one-decibel increase in airport noise diminished as the distance a property is located from the airport increases. This study concluded that a one-decibel increase in noise does not statistically affect the market sale value of residential properties.

Information about the impact of airports on residential property value can be valuable, especially to officials associated with airports experiencing increasing flights or expansion. Such growth may not have been anticipated at the time of purchase and the homeowner may be negatively impacted by the changes. This study does not account for future expectations, but it does provide some new information for the Port of Portland, owner and operator of the airport and for others in the area around the airport, including homeowners. This report and other airport-land use related studies may aid in broad policy decisions for noise abatement alternatives and estimates based on property value data.

FURTHER STUDY

This study forms the foundation for a future study to further explore the relationship between general aviation aircraft noise, and residential sale values near a general aviation airport. The analysis in this paper can be improved along several research avenues. First, the regression would probably benefit from the addition of additional independent variables since the price of homes is determined by many factors. Examples of possible independent variables include the number of floors, the presence of a fireplace, heater, or airconditioning, and the presence and size of a garage. Further analysis of the Portland-Hillsboro Airport can also analyze a time period of several years to determine a trend in

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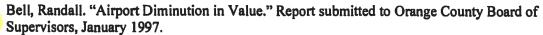


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Airport Diminution in Value

The following document was submitted to the Orange County Board of Supervisors by Randall Bell, MAI. Mr. Bell is the principal of Bell & Associates, Inc. Of Santa Monica and Laguna Niguel. He holds an MBA in Real Estate from UCLA, is a Certified General Real Estate Appraiser and a Licensed Real Estate Broker. Mr. Bell is an instructor for the Appraisal Institute, was the Chair of the Litigation Seminar in 1994 and 1995 and has published numerous articles in various legal and professional publications. Information in this letter is also included in an article entitled Ten Standard Classifications of Detrimental Conditions published in Right of Way magazine.

January 9, 1997

Orange County Board of Supervisors, 10 Civic Center Plaza Santa Ana, California 92702

Re: Proposed International Airport Use El Toro Marine Base Our File:96-55

Gentlemen:

Utilizing standard valuation methodologies and market data, I have made a preliminary analysis in order to determine the diminution in value, if any, to properties located in proximity to the proposed international airport on the El Toro Marine Base site.

The Environmental Management Agency Staff Report, page 13, and dated November 21, 1996 states in part:

While some researchers have conducted "valuation" studies in areas around airports in the United States, these studies have little, if any, application to the circumstances projected for the proposed project...Such studies are frequently statistical studies which make little or no attempt to normalize the data for property specific factors. This makes it extremely difficult to isolate airport noise (or even airport proximity) as the causation factor in any conclusions regarding effects on value.

The report further states:

In these areas, proximity to an airport may have certain positive effects on residential property values. These may include extensive transportation network improvements, accessibility to jobs because airports are typically employment centers, and reduction in general travel costs. Hence, the net effect on housing prices may not be negative.



No market data is presented to support these comments. Apparently this report has drawn the conclusion that it is not possible to access any impact caused by airports, yet then accesses that the impact may be positive.

The statements contained within the EIR are based on something other than generally accepted valuation methodologies. The most fundamental aspect of real estate valuation studies is that conclusions must be based upon market data. Relative to many detrimental conditions such as environmental contamination, geotechnical issues and natural disasters, airport noises very straight-forward to study and assess. Isolating a single component of value, such as airport noise and proximity, is a familiar and routine procedure.

Our firm has been involved in the study of diminution in value for many years. In the course of this work, we have developed a chart which categorizes over 200 types of conditions that impact real estate values. These findings have been published and have been presented in seminars sponsored by various professional organizations. This chart sets forth these classifications of various Detrimental Conditions (DCs) and is set forth as <a href="Exhibit 1. Airport proximity is categorized as a "Class V DC", which is the classification given to DCs involving Imposed Conditions." The course of the course

THE BELL CHART TEN CLASSIFICATIONS OF DETRIMENTAL CONDITIONS

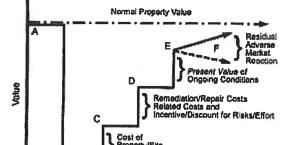
	Class	Definition	Types of Conditions	Diminution	in Value
1	No Detrimental Condition (DC) or Benign Condition	No DC. Or an event occurs, but it has no impact on value.	Any DC If No Impact Sales Arrangement at Market (if Over Market it out I Vinder IV) Sale-League that it contract Outsto-Substant Perchase Tarest of Condemnstics/fuction First Right-of-Ratural Double Sacrow	Key to Graphs	
11	Non-Market Motivation	Any issue that inflates the price paid over market value. A defirment to the buyer in terms of higher price.	Special Buyer Molivation Assemblage/Expansion Redevelopment Zone Feng Shui	Neduo Renta DC	Non-Market 8
111	Market Condition	The increase or decrease of value due to general market conditions	Economy/Supply & Demand Recession/Depression Lease or Rolling Option Exercise of Option/Takedown	Incessing Values	Cocreating Values
IV	Temporary Condition	A short-term event or one-time situation	Distress Sale"/Tragedy"* Bulk-Portfoto Sele/Business Inc. Absorption/Temp. Easement Deferred Maintenance/Legal 'Sentrepsy-Proofe-Estate-Sant Gale 1/3 Abrahan REOTO CReceive migratic "Crime Scene/Aucklem Disease-Riot	Tempomry Constian	Attacrption or AWA
٧	imposed Condition	An act or forced event that affects value. Usually long-term or permanent	Neighboring Nuisance* Bond or Tax Assessment Downzone/Historical Site Entirent Domain/Ground Lease Deed Restriction/Easperacht *Sawge-Power-Nuclear Pent/Style	Impaged Act or Eyem	Diministry Etea
Vi	Super-Surface Construction Condition	A construction issue above grade	ADA Non-Compliance Not to Code/Lead Paint Construction Defect Poor Workmanship/Asbestos Water Intrusion Above Grade	Repaired Condition	Residual Condison
VII	Sub-Surface Construction Condition	A construction issue below grade	Oralnage/Tunneling Faulty Foundation/Cut & Fill Retaining Wall or Slope Site Grading/Soil Compaction Water Intrusion Below Grade	Rapaired Conddisc	Resignal Condition
VIII	Environmental Condition	A man-made environmental or contamination issue	Archeological Site/Oil Split Ground Water Contamination LandittPCB's/TCE's/PCE's Soil Contamination*LUST/Dump CERCLA/Toxic Waste	Repaired Condition	DC Model
IX	Natural Condition	A natural occurrence or natural disaster	Wetlands.Earthquake/Voicano Expansive Soll/Sulfates Geolectroical/Food/Landside Endangered Specias/Radon Stope Instability/Infestation	Repaired Candillon	DC Model
x	Incurable Condition	A condition that connet be economically or physically remedied	Applicable to many DCs in severe situations	A C	LiabAiy A D

The graphs Restrate Spirital value patterns and pharacteristics, but are not interested to quantify towns. All six starrants (AP) around to operational units any DC Version 2.2 to 1925 founded Both MAL Used by particulars.

Overview of Diminution in Value Studies

The basic premise of diminution in value issues is depicted by the Detrimental Condition Model, as set forth as **Exhibit2**. This model basically illustrates that there are six considerations that must be made when quantifying the diminution in value due to a DC. These are outlined as follows:

- (A) The value of properties in an undamaged condition.
- (B) The value upon the occurrence of a DC.
- (C) The costs to assess the situation. These costs typically occur when engineering studies are required to access environmental or geotechnical issues.



DETRIMENTAL CONDITION (DC) MODEL

- Time

 Copyright 1988, Randok Bull, hills

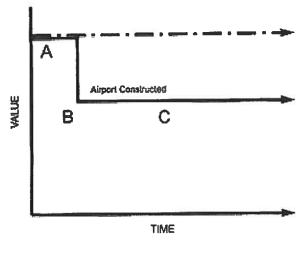
 Lined by parameters
- (D) The costs to repair and remediate the problems. Many DCs require repairs or remediation, such as construction defects, environmental contamination, etc.
- (E) The costs of any on-going conditions or monitoring. For example, a flood-damaged property may incur the costs of maintaining a revetment or levy, and a contaminated property may require on-going monitoring. Construction defects, with the exception of encapsulated or enclosed asbestos, do not typically incur such costs.
- (F) The discount or incentive to entice a prospective buyer to purchase a previously damaged property. This reflects the discount for the risks, contingencies and trouble to which a buyer is exposed when purchasing a damaged property. This is sometimes termed "residual adverse market reaction" or "stigma".

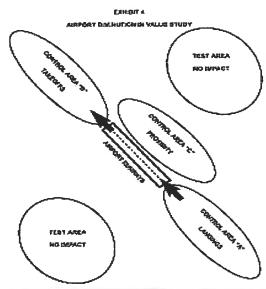
Preliminary Airport Diminution in Value Study

As stated, airport noise is a Class V DC. Compared to Class VI through Class X DCs, Class V DCs are relatively simple to assess as they require only the measurement of two points, as opposed to six. These two points are "A" the value as if there is no DC and, "B" the value upon the DC occurring. This concept is illustrated within **Exhibit3**.

This preliminary study is accomplished by the utilization of a "paired-sales analysis", whereby paired sets of data are compared to each another. The basic market data search perimeters are set forth as **Exhibit 4.** As this exhibit illustrates, the objective is to examine sales comparables that are similar in all respects except for their airport proximity.

IMPOSED CONDITION DC Class V (Imposed Act or Event)





In this preliminary study, single-family residences containing from 1,500to 2,000 Sq Ft (except Ontario which contained from 1,000 to 1,500 SqFt), have similar lot sizes and sold within the last six months. Further, the homes are all located in the same or similar nearby communities. By utilizing these search perimeters, virtually all non-airport elements of value are eliminated, such as the size of the improvements, location, market conditions, etc. In all, 190 sales comparables were studied. The results of this paired-sales analysis are summarized on **Exhibit 5.**

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EXHIBIT 5

AIRPORT DIMINUTION IN VALUE - Preliminary Study

O11	Average Home Price Not By Airport		A44	 .		Average		
Control No:			No of Sales	Test No:	Home Price Near Airport	No. of Sales	Percent Gain/Loss	
Los Ang	cles	Internationa	I Airport	:				
1	\$	423,830	33	1	\$	275,380	20	-35.0%
2	\$	324,480	26	2	\$	243,350	13	-25.0%
1	\$	324,480	33	2	\$	275,380	20	-15.1%
2	\$	423,830	26	1	\$	243,350	13	-42.6%
Otange	Çoun	ty Airport						
3	\$	270,500	3	3	\$	206,170	14	-23.8%
4	\$	443,250	16	4	\$	324,160	4	-26.9%
Ontario I	ntern	ational Airp	ort					
5	\$	114,290	10	5	\$	87,850	51	-23.1%
Low								-15,1%
High								-42.6%
Average								-27.4%

This study indicates that airport proximity consistently has a negative impact on value. This market data indicates that single family residences located in proximity to an airport are worth less than an otherwise similar property that is not located by an airport. This impact on value ranges from - 15.1% to -42.6% and averages -27.4%.

Office Market Study

As part of this preliminary study, I have reviewed secondary market data related to the LAX office market. It is well known within the real estate

community that the LAX market is the lowest in terms of rental rates of any office market in the region. This is in spite of the office market having outstanding freeway and airport access, and the office improvements themselves being comparable with other office buildings in the area.

The LAX office market is distinct from other markets in that many of the office buildings are located on Century Boulevard directly under the airport's final landing approach. These office buildings have similar features and amenities and are otherwise comparable with other office buildings throughout Southern California, except these office buildings are subjected to considerable noise and related airport issues. The LAX office market has an average effective rental rate of \$0.85/SqFt. Other office buildings within the South Bay office market have average effective rental rates ranging from \$1.05/SqFt to \$1.50/SqFt. The rental rates for the LAX office market range from 19.1% to 43.3% lower than any other market in the surrounding South Bay area. Combined with the effects of also having the highest vacancy rate of 38.1%, the negative net impact on value is further amplified. A comparative summary of rental rates and vacancy rates are set forth within Exhibit 6.

Exhibit 6

South Bay Office Building Market 1995 Vacancy and Absorption SqFt in 1,000

Submarket	Rentable SqFt	Vacant SqFt	% Vacant Direct	Net Absrp.	Effective Rent \$/SqFt FSG
El Seg/Man Bch	9,295	1,933	20.8%	-330	\$1.50
Torrance Frwy	3,291	1,070	32.5%	-266	\$1.35
Torrance Central	3,255	629	19.3%	80	\$1.40
Carson	1,621	330	20.4%	45	\$1.05
LAX/Century Bl	4,198	1,599	38.1%	- 70	\$0.85
Long Beach Sub	4,278	615	14.4%	458	\$1.35
Long Beach Dtwn	3,826	996	26.0%	-120	\$1.40
South Bay Total	29,763	7,171	24.1%	-203	\$1.28

Source: Grubb & Ellis 1996 Real Estate Forecast

Note: 1995 numbers include estimates for the forth quarter that were derived in early December.

Conclusions

The market data from this preliminary study indicates the following:

- 1. National and international airports impact the values on properties in close proximity.
- 2. The impact on single-family residences located in proximity to an airport is consistently negative, as compared to otherwise similar properties not located near an airport.
- 3. The impact on single family residences ranges from -15.1% to -42.6%, and averages -27.4%. This does not include the costs of noise mitigation measures that individual homeowners may incur.

Additional studies could refine and better delineate this impact, and it should be noted that various degrees of impact exist that this preliminary study does not address. For example,

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properties in closer proximity to an airport are more significantly impacted as opposed to those properties located further away. Additionally, there may be distinctions between locations on the final landing, takeoff and side-proximity that this preliminary study does not address.

4. The LAX office market enjoys outstanding transportation access and the improvements are comparable with other office buildings in the area; however, this market is distinct in that it is located under the final landing approach to an international airport. The rental rates for the LAX office market are from 19.1% to 43.3% lower than any other office market in the surrounding South Bay area. Combined with the effects of also having the highest vacancy rate of 38.1%, the negative net effects on value are further amplified. These figures do not include any special noise mitigation costs incurred by the property owners.

Real estate valuations and diminution in value studies are meaningful only if based upon market data. From the perspective of a real estate analyst, making value judgments or reaching conclusions without market data support is irresponsible at best. While this is only the simplest of studies, I hope that this report will serve as a beginning point for all parties to focus on meaningful market data as a basis for their findings.

Very truly yours,

Randall Bell, MAI

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The Impact of Airports on Home RECEIVED

APR 1 5 2013

By Leonard Kranser, Editor

Updated July 16, 1997

CHAMPAIGN CO. P & Z DEPARTMENT

Mr. E.P. Benson, President of the Dover Shores Community Association, in Newport Beach, wrote to the Orange County Planning Commission on November 16, 1996, as follows: "Our community has experienced and had to endure the unpleasantness of living under the Airlines take-off flight route from John Wayne Airport ever since it opened as a Commercial Airport." Mr. Benson went on to argue for transferring that experience to the El Toro community.

There is one fact that residents near John Wayne and residents near El Toro agree upon. Homeowners are asked to "endure ... unpleasantness" when they have an airport for a neighbor. "Unpleasantness" is a euphemism for noise, air pollution, accident hazards and traffic.

The mantra of real estate professionals is "location, location, location" in the choice of a neighborhood in which to live. No one willingly chooses to buy a home with "unpleasant" neighborhood elements, under a flight path, next to a freeway, down wind from a refinery or beneath power lines, unless they are enticed by an attractive price for the property.

Real estate law requires sellers to reveal noise and other nuisance factors, including airports, in a Real Estate Transfer Disclosure Statement, prior to sale, so that prospective buyers are warned. This allows informed buyers to look elsewhere. or to lower their offers. It follows that home values will be substantially lower around an aviation reuse of El Toro than around a non-aviation use. Logic dictates that home values will be lower, around a heavily used major international airport, than around an infrequently used military base.

STUDIES MEASURE AIRPORT IMPACT

In 1994, the consulting firm of Booz-Allen & Hamilton, Inc. was commissioned by the Federal Aviation Administration to prepare a study entitled, *The Effect of Airport Noise on Housing Values: A Summary Report.* Clearly, the FAA was concerned about this matter. The study developed a methodology for evaluating the impact of noise on housing values, by comparing market prices in similar neighborhoods that differed only in the level of airport related noise. The study found that the effect of noise on prices was highest in moderately priced and expensive neighborhoods. For two moderately priced "paired" neighborhoods north of LAX, the study found "an average 18.6 percent higher property value in the quiet neighborhood, or 1.33 percent per dB of additional quiet."

http://www.eltoroairport.org/issues/impacts.html

3/20/2013

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HOHE VAIUES

A 1996 study, funded by a grant from the Legislature of the State of Washington, used somewhat similar methodology and found that the proposed expansion of Seattle-Tacoma Airport would cost five nearby cities \$500 million in property values and \$22 million in real-estate tax revenue. The study of single family homes in "very good" condition, with "three or more bedrooms and two or more baths" and "excluding the most expensive and inexpensive units to provide more representative comparisons" found that "a housing unit in the immediate vicinity of the airport would sell for 10.1 percent more-- if it were located elsewhere."



The study also concluded that, "all other things remaining equal, the value of a house and lot increases by about 3.4% for every quarter of a mile the house is farther away from being directly underneath the flight track of departing/approaching jet aircraft". Click here for the full report, available to the El Toro Airport web site from the Regional Commission on Airport Affairs, a Washington State affiliate.

In 1997, Randall Bell, MAI, Certified General Real Estate Appraiser, Licensed Real Estate Broker and instructor for the Appraisal Institute, provided the results of his own professional analysis to the Orange County Board of Supervisors. After examining 190 sales comparables over the previous six months, in communities near LAX, John Wayne airport and Ontario Airport, Mr. Bell found a diminution in value due to airports averaging 27.4 percent.

ACTION AVAILABLE TO HOMEOWNERS



Realtors have reported cases where offers were withdrawn or lowered in the El Toro vicinity as a result of airport plans. Homeowners who believe that their property already has decreased in value can request reassessment. Appeals forms can be obtained from the County Assessor, PO Box 149, Santa Ana 92702 or call (714) 834-2941. Homeowners receive postcard Notices of Assessment each spring.

Issues Main Page

Home



Champaign County

Soil and Water Conservation District 2110 West Park Court Suite C Champaign, IL 61821 (217) 352-3536 Extension 3 --- fax 855-289-5179 www.ccswcd.com

Phil Jones Property
Property Management Plan
March 22, 2013

RECEIVED

MAR 2 2 2013

CHAMPAIGN CO. P & Z DEPARTMENT

Many of the management techniques applicable for the site are described in various Natural Resources Conservation Service Standards. I have selected those most appropriate for the site and then commented on the specific portions that most fit this location.

The grassed areas are addressed in Standard #645 for Upland Wildlife Habitat Management. The entire practice standard is attached to this report for reference. The following are comments on the most critical sections and how they apply to this site. The section on page 2 labeled for Grasses, Legumes and Forbs Development lists strip disking or burning as management practices. The native prairie planting along the runway on the east portion could benefit from these management techniques. The key is to do the disking or burning on 1/3 of the area each year. This is done so adequate undisturbed habitat is available for wildlife during the management practice. Burning requires a permit from the IEPA that needs to be applied for annually. Some practices such as brush piles mentioned on page 5 could add to the habitat desirability of the site.

Standard Practice 647, Early Successional Habitat Development/Management also applies to the site. Prescribed burning and strip disking are included in this standard.

Also included is Practice Standard 338 for Prescribed Burning. There is an attempt being made to form a group of local people who would assist with burning. A trailer with burn equipment is available through Pheasants Forever. Burning would help the wooded as well as the grassed areas, especially if the bush honeysuckle could be removed.

The timber areas should be managed following the information in the Forest Stand Improvement practice #666. The key is to keep invasive species out and thin the trees so the tree canopies meet, but do not grow into each other. Trees that have competition cut away are released from competition and develop into more desirable trees. A site visit revealed a significant bush honeysuckle infestation that should be the first priority. There are companies that have forestry cutters that can come in and cut down what you have and grind it up in one operation. We have leased equipment to do this on our wetland and it is very successful. They would still need a herbicide treatment to prevent future grow back. Trees in this area can be selectively harvested as part of a management plan and the area would still be valuable wildlife habit. The National Wild Turkey Federation has a forester in the area that could prepare a specific plan for the site if desired.

A number of trees have been planted on the berms present and around the grounds. These plantings will add to the value as a conservation area.

Bruce Stikkers

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

UPLAND WILDLIFE HABITAT MANAGEMENT

(Ac)

CODE 645

DEFINITION

Provide and manage upland habitats and connectivity within the landscape for wildlife.

PURPOSE

Treating upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

- Land where decision-maker has identified an objective for conserving a wild animal species, guild, suite, or ecosystem.
- Land within the range of targeted wildlife species which is capable of supporting the desired habitat.

CRITERIA

General Criteria Applicable to all Purposes

The Illinois Wildlife Habitat Evaluation or species-specific habitat model, approved by the NRCS state office, shall be used to identify habitat-limiting factors in the planning area.

Application of the practice shall remove or reduce limiting factor(s) in their order of significance, as indicated by results of the habitat evaluation.

Application of the practice alone, or in combination with other supporting and facilitating practices, shall result in a conservation system that will enable the planning area to meet or exceed the minimum quality criteria for wildlife habitat established in Section III of the FOTG.

Plant material specifications shall include only high quality and adapted species.

Native plant materials will be used whenever possible. The use of native species will reduce problems associated with non-adapted and invasive plants.

Site preparation, planting dates, and planting methods shall optimize vegetation survival and growth.

If grazing is used as a management tool, then PRESCRIBED GRAZING (528) must accompany the practice.

Equipment travel, grazing, haying and other disturbance to habitat shall be restricted during critical periods such as nesting. Exceptions may be made during the period of vegetation establishment and for management activities to maintain the health of the plant community and to control noxious and invasive weeds.

Techniques for control of regulated noxious weeds and other invasive plants shall be specified.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible.

Any habitat management technique used will ensure soil loss is within tolerable limits (T).

Protect forbs and legumes that benefit native pollinators and other wildlife and provide insect food sources for grassland nesting birds. A diversity of forbs and other plants with showy flowers is desirable in all plant communities for the benefit of native pollinators. Spraying or other control of noxious weeds shall be done on a "spot" basis, where possible.

Additional Criteria to Provide Specific Cover Types for the Desired Wildlife Species.

CROPLAND

The Illinois Wildlife Habitat Evaluation should be consulted for minimum criteria for cropland recommendations for wildlife.

CONSERVATION CROPPING SEQUENCE (328), CONTOUR BUFFER STRIPS (332), STRIP CROPPING (585), and CONSERVATION TILLAGE (329), can provide positive habitat values. Use of a diversified crop rotation and reduced tillage, especially no tillage after harvest until spring, will benefit wildlife.

The introduction of cover types and plant diversity increase the habitat values of cropland. FIELD BORDER (386) and GRASSED WATERWAYS (412) can introduce a valuable grassland component into cropfield situations when beneficial species and management are used. See Field Border Wildlife Job Sheet (386w) and Grassed Waterways Wildlife Job Sheet (412w) for more information. Native plants are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat with less long-term maintenance.

RIPARIAN FOREST BUFFER (391) AND HEDEGROW PLANTING (422) practices placed in or adjacent to cropland can increase the cropland value for wildlife by adding a tree and shrub component, where appropriate.

Maintain existing cover within or adjacent to cropland such as grown up fence rows, thickets, idle grassland, old fields and woody draws.

Reduced/eliminated chemical use will allow significant growth of annual plants, thus enhancing the cropfield values for wildlife.

GRASSES, LEGUMES AND FORBS Development

High quality nest and brood cover for grassland species of wildlife are critically needed cover types for upland wildlife in Illinois. Native plants and communities are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat with less long-term maintenance.

However, due to cost, availability, and landscape position, native plants may not be feasible in all situations.

CONSERVATION COVER (327) or RESTORATION and MANAGEMENT of DECLINING HABITATS (643) will be used to develop grassland cover for wildlife. Seeding mixes for wildlife will contain at least 3 species with at least one species that is a legume.

Eradication of introduced invasive plant species is recommended to provide suitable conditions for grassland development.

Interseeding of legumes and forbs into existing grass stands can provide a needed food source and add plant diversity to attract beneficial insect populations.

CONSERVATION COVER (327) will be used for appropriate seeding mixtures/techniques for the reestablishment of legumes into existing grass stands.

Management

Used alone or in combination with other techniques, mechanical methods can successfully manipulate successional stages of habitat. See EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT (647) and RESTORATION and MANAGEMENT of DECLINING HABITATS (643) for additional information.

Strip Disking

Strip disking (2-4" deep leaving at least 50% bare soil) of existing stands (greater than 4 years old) may be necessary to increase the amount of open ground and encourage a diverse plant community of annual and perennial plants. Disk between October 1 and April 15. Alternate disked strips 75' wide or less, with buffer strips at least 2 times the disked width, across the field on contour/cross-slope. Rotate disked and undisked strips on a 3 year or longer rotation. Disking shall be done within tolerable soil loss limits. Use Strip Disking Job Sheet 647A for planning site specific strip disking applications.

Mowing

Annual mowing or mowing of entire stands is discouraged since mowing greatly decreases plant diversity and reduces residual cover available for the following nesting season. If

mowing is necessary to maintain legumes, reduce and control noxious weeds and woody plants, two options are available:

- 1) Mow once, using a rotary or flail mower, during August. Most ground nesting wildlife will have completed their nesting cycle yet there is still growing season remaining to allow residual growth. Mow no more than one-third of the field every year alternating mowed and unmowed strips at least 30 feet wide or wider. Rotate mowed strips across the field every year. Mow cool season grasses no shorter than 6 inches. Native warm season grasses should be mowed no shorter than 8 inches.
- 2) A second option for mowing would be strip mowing in the spring. Mowing should be done March 15 to April 15 to encourage vegetative diversity without greatly impacting ground nesting activities or loss of fall food plants. Mow at least 6 inches high and no more than one-third of the field every year. Rotate mowed strips across the field every year.

If mowing is used as a habitat management practice, residues will be thoroughly shredded to prevent excess litter accumulation.

Prescribed Grazing

Use PRESCRIBED GRAZING (528) to manipulate plant succession, reduce ground litter, and provide dusting areas. Livestock can be beneficial to maintaining the quality of herbaceous cover and controlling invasive plants when managed in accordance with a grazing plan with wildlife habitat management as the primary objective. The grazing technique requires careful management to prevent overgrazing. Timing of having and grazing will avoid peak periods of wildlife nesting and allow the establishment. development, and management of vegetation for the intended purpose. When possible, rotational grazing should be utilized to benefit wildlife during rest periods.

Prescribed Burning

Use PRESCRIBED BURNING (338) to remove excess litter, which can reduce the quality of wildlife habitat. Controlled fire can allow germination of seed bearing annuals, increase plant species diversity, control unwanted woody cover, and open up the stand for movement of small animals and birds. Burn no

more than one third of the grassland acres in an area, in any one year. However, exceptions can be made to burn up to 50 percent of an area in cases of small fields and when weather conditions have prevented burning in previous years. Consider the effect of the timing of the burn on wildlife species using the grassland.

Herbicide Treatment

Use selected herbicides to manipulate plant succession and improve habitat diversity. Careful planning and care in application are required in the use of chemicals to improve existing habitat. Selection of a product should be based on several factors including product effectiveness, non-target species impacts, toxicological risks, and off-site movement of chemicals. See Conservation Planning Standard PEST MANAGEMENT (595) and Job Sheet 647B Herbicide Application for Plant Succession Management for recommendations and precautions.

WOODLAND AND SHRUBLAND

Development

Species recommendations will be based on landowner objectives and site potential. Planting trees and shrubs has the potential of adversely affecting non-target species. Careful consideration must be given when planting trees and taller shrubs in historic prairie region of the state. Soils and site potential should guide the plant species selected. See RESTORATION AND MANAGEMENT OF DECLINING HABITATS (643) for more information.

Woody plantings will follow the criteria and guidelines in HEDGEROW PLANTING (422), TREE/SHRUB ESTABLISHMENT (612), WINDBREAK/SHELTERBELT ESTABLISHMENT (380). These standards provide guidelines for clump and block plantings and reinforcement of existing woody cover.

Where dense woody cover is lacking, but necessary to meet species objectives, areas(s) comprising native shrubs can be established. Plant clumps of native shrubs, 1,500 square feet to ¼ acre in size, for each 5 to 40 acres of habitat that lacks woody cover. See Quail Covey Headquarters Job Sheet 645B for more information and specifications.

Management

Manipulation of woody tree and shrub stands to achieve early successional plant composition encourages re-growth and regeneration (suckering) of palatable and nutritious vegetation beneficial to large mammals. Browse management also increases plant diversity, which supports a variety of other species. Browse management can be accomplished by mechanical (shearing, hand-cutting, mowing, etc), or prescribed burning.

Encourage old growth trees (greater than 80 years or 16 inches diameter breast height (dbh) by deferring timber activities to maximize wildlife values on at least 10 percent of the forested area.

Forest Stand Improvement

Removal of competition will provide sunlight and growing space necessary for full crown development of the target species. FOREST STAND IMPROVEMENT (666) will be used for recommendations on thinning extent and techniques.

Preserve and create through Forest Stand Improvement, den trees (trees with cavities large enough to shelter wildlife) and snags (standing dead trees and limbs) which serve many purposes for forest wildlife species. For upland interior forested areas, leave at least 6 snags and 7 den trees per acre. Ideally, leaving 1 den tree greater than 20 inches dbh, 4 snags and 4 den trees in the 10 - 20 inches dbh range, and 2 snag trees and 2 den trees less than 10 inches dbh per acre in order to provide an optimal mix. Floodplain forest areas should have even more, with optimum levels of 12 snags and 25 den trees per acre.

Maintain non-invasive native vines to the maximum extent possible. Leave at least 4 - 6 live native vines per acre on trees. Leave vines on den trees and trees that are not considered crop trees for other purposes.

Livestock Exclusion and Access Control

Livestock shall be excluded from woodland when forest succession is reliant upon natural regeneration of seedlings. Conservation practice standard USE EXCLUSION (472) can be used to prevent improper use of wooded areas by livestock. To improve woodland edge

habitat and adjacent grassland habitat, install the fence with at least a 30 foot setback from the woodland edge.

Woodland Edge Feathering

Edge feathering can be used to create a transitional habitat zone of shrubs, vines and herbaceous vegetation between cropland or grassland and the overstory canopy along a woodland edge. There are three methods to feather the edge of woodland.

- Thin overstory trees in the first 60 to 90 feet of the woodland edge. The regrowth and sprouting that result will provide benefits for 5 to 10 years. Invasive species (e.g., bush honeysuckle and multiflora rose) must be controlled before the overstory is thinned.
- Create a feathered edge along woodland by planting shrubs and grasses in the open field along the woodland edge. Plant at least 2 rows of shrubs along the woodland edge and a field border along the cropland edge to make up a zone at least 30 feet wide.
- 3. Natural regeneration. Shrubs, brambles and vines may be used where seedlings are present and cessation of mowing or cultivation will allow desired vegetation to grow. Where invasive species are present (e.g., bush honeysuckle and multiflora rose) plant desired species rather than allowing natural regeneration.

To maintain maximum values of the feathered edge, the area should be re-treated when more than 50 percent of vegetation in the transitional zone exceeds a height of 15 feet. See Woodland Edge Feathering Job Sheet 645D for more information and specifications.

WILDLIFE CORRIDORS

Corridors are established to connect isolated and fragmented habitat areas and increase the number of connections between habitats. Wildlife corridors are often planned as field borders, hedgerows, windbreaks, etc.

Wildlife corridors are developed by establishing a band of vegetation suitable for wildlife cover that connects one habitat area with another. When possible, vegetative composition of a corridor should be similar to

the habitat areas that are being connected. See FIELD BORDER (386) and Field Border Wildlife Job Sheet (386w) for more information.

For species selection, see Biological Technical Note #22 Planning Tree and Shrub Plantings for Wildlife, and conservation practice standard 327 CONSERVATION COVER for plants that provide wildlife habitat and site requirements for each plant species.

The minimum width for a wildlife corridor is 30 feet to reduce excessive predation on wildlife using these edge habitats.

Root pruning can be used to prevent encroachment of woody material into cropfield edges. Root pruning is used to maintain crop yields adjacent to woody fencerows or woodland. Root pruning on a 3 - 5 year interval prevents crop yield reduction.

When corridors are established and managed for wildlife in an area that is grazed, the edge will be fenced to exclude livestock.

Herbaceous corridors should be treated to control woody vegetation. If mowing is used, mow only once in August. If mowing is used as a habitat management practice, residues will be thoroughly shredded to prevent excess litter accumulation.

Additional Criteria to Provide Structures for Nesting and Shelter for Desired Wildlife Species.

Artificial nest structures can provide nesting opportunities for cavity or roost nesting birds. Design, specifications, and construction shall be consistent with plans included in the IDNR "Wood Projects for Illinois Wildlife", NRCS Fish and Wildlife Habitat Management Leaflet #20 Artificial Nesting Structures at:

http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=25175.wba or other designs specified by a technical wildlife agency.

Brush piles of at least 10 - 15 feet in diameter and 6 - 8 feet high can be developed with the material left from forestry practices. Brush piles can provide shelter for many wildlife species from predators and severe weather. Rock piles can be built to benefit amphibians and reptiles. See Wildlife Brush Piles Job Sheet 645C for more information and specifications for constructing both brush piles and rock piles.

Additional Criteria to Provide a Variety of Foods for the Desired Wildlife Species.

Many wildlife species depend on and prefer native weed seeds and wild fruits for winter food. In many of Illinois' agricultural landscapes food plots may be unnecessary because waste grain and weed seeds are available to wildlife for food. However, additional high-quality food can be provided in the form of unharvested grain crops, green browse food plots or standing grain food plots.

Strips of unharvested grain can be left along the edges of adjacent other cover types.

Strips should be at least 30 feet wide (12, 30 inch rows) and at least one-quarter acre in size

Food plots should be located on the least erosive areas of each field. Soil loss must be maintained within tolerable limits (T). Adequate vegetative cover must be developed and maintained to provide both wildlife and erosion control benefits. If food plots are relocated or discontinued, the site will be reseeded after a year of fallow.

Plots may be located on slopes greater than 5 percent provided soil losses do not exceed tolerable limits (T). Plots planted on the contour are recommended.

The food plot should be adequately fertilized. Proper fertilization will help ensure successful establishment and growth of the food plot.

Weed control may not be required as some weeds such as foxtail and ragweed actually benefit wildlife by providing higher protein and greater number of seeds than domestic grains.

Food plots will be protected from livestock grazing.

Plantings shall be seeded at proper time to ensure maturity of food plants.

See Illinois Wildlife Food Plot Job Sheet 645A for additional information and specifications.

Additional Criteria to Provide Water Requirements for the Desired Kinds of Wildlife Species.

Water requirements for Illinois' upland wildlife species can be met with one year-round

source of surface water within one-half mile of the habitat. To develop sources of water for wildlife, use the WATERING FACILITY (614) Standard or POND (378) Standard.

CONSIDERATIONS

The practice may affect the target species as well as non-target species through mechanisms such as hunting, predation, disease transmission, nest parasitism, etc. Consider effects of the practice on species with declining populations.

Wildlife population control may be necessary to protect and maintain certain habitats, which is a responsibility of the landowner. State and federal regulations may apply to population control methods.

Undisturbed areas conserved at a sufficient extent during management activities may sustain disturbance-intolerant animals and plants.

Other conservation practices may be utilized in conjunction with the practice to create a wildlife management plan such as:

Conservation Cover (327) Early Succession Habitat

Development/Management (647)

Field Border (386)

Filter Strip (393)

Forage Harvest Management (511)

Forest Stand Improvement (666)

Hedgerow Planting (422)

Pasture & Hay Planting (512)

Pond (378)

Prescribed Burning (338)

Prescribed Grazing (528)

Restoration and Management of Declining

Habitats (643)

Riparian Forest Buffer (391)

Riparian Herbaceous Cover (390)

Tree/Shrub Establishment (612)

Use Exclusion (472)

Watering Facility (614)

Windbreak/Shelterbelt Establishment (380)

PLANS AND SPECIFICATIONS

Plans and specifications for the practice shall be prepared by persons with adequate training in the fields of wildlife management, biology, or ecology. Written specifications, schedules and maps shall be prepared for each planning area and each habitat type.

Specifications shall:

- Identify the amounts and kinds of habitat elements, locations and management actions necessary to achieve the client's management objectives.
- Describe the appropriate method, timing and intensity of management needed to produce the desired habitat conditions and sustain them over time.

Specifications shall be transmitted to clients using NRCS approved specifications sheets, job sheets, or customized narrative statements included in the conservation plan.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that the practice functions as intended throughout its expected life:

- Evaluate habitat conditions on a regular basis in order to adapt the conservation plan and schedule of implementation.
- Annually inspect and repair structural or vegetative components of the practice.

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NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT (Ac.)

CODE 647

DEFINITION

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

PURPOSE

To provide habitat for species requiring early successional habitat for all or part of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

On all lands that are suitable for the kinds of desired wildlife and plant species.

CRITERIA

Management will be designed to achieve the desired plant community structure (e.g., density, vertical and horizontal cover) and plant species diversity.

Where planting is needed, regionally adapted plant materials will be used.

Site preparation, planting dates, and planting methods shall optimize survival.

Planting of noxious weeds and invasive species is prohibited.

Measures must be provided to control noxious weeds and invasive species.

If using chemical methods of control, Pesticide Screening Tool (WinPST) shall be used to assess risks, and appropriate mitigation to reduce known risks shall be employed.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds will be in a targeted manner through the use of spot spraying, mechanical or hand wick applicators, or other approved methods to protect grasses, forbs and legumes that benefit native pollinators and other wildlife.

Minimize soil disturbance in natural communities where soil integrity is essential, on steep slopes, on highly erodible soil, and where establishment of invasive species is likely.

When grazing is used as a management tool, a prescribed grazing plan developed to specifically meet the intent and objective(s) of the practice standard is required.

Management will be timed to minimize negative impacts to wildlife. Management practices and activities shall not disturb cover during the primary nesting period for grassland species (April 15 – August 1). Exceptions can be allowed for periodic burning, strip disking, selected herbicide techniques, selected mechanical removal or mowing when necessary to maintain the health of the plant community. Mowing may be needed during the plant establishment period to control undesirable weeds and growth of woody vegetation.

Vegetative manipulation to maximize plant and animal diversity can be accomplished by disturbance practices including: strip disking, selected herbicide techniques, mowing, prescribed burning, prescribed grazing, woodland edge feathering or a combination of these. Additional criteria for specific disturbance practices applied for the purpose of Early Successional Habitat Development /Management are:

Strip Disking - Light disking strips of existing grass stands, typically greater than 4 years old, may be required to increase the amount of open ground and encourage annuals (foxtails and ragweeds). The result will be a diverse plant community of both annuals and perennials.

 Disk strips 2-4 inches deep to expose approximately 50% bare ground after disking.

> NRCS, Illinois April 2011

- Disk between October 1 and April 15.
- Alternate disked strips of 75 feet or less in width, with undisturbed strips a minimum of 2 times the disked width, across the field on the contour or across slope.
- Rotate disked and undisked strips on a 3 year or longer rotation.
- Disked strips shall not exceed the tolerable soil loss.
- See Strip Disking Job Sheet 647A for additional information and specifications.

<u>Herbicide Techniques</u> - Selected herbicides can be used to effectively manipulate plant succession, control brush, reduce plant competition, control exotic weeds, and improve habitat diversity.

- Careful planning and care in application are required in the use of herbicides to improve existing habitat. Selection of a product shall be based on several factors, including: (a) product effectiveness, (b) non-target species impacts, (c) toxicological risks, and d) off-site movements of chemicals.
- Herbicides are to be applied only for the uses listed on the container label. Follow all directions and precautions. See conservation practice standard Pest Management (595) for recommendations and precautions.
- See Herbicide Application for Plant Succession Management Job Sheet 647B for additional information and specifications.

<u>Mowing</u> – Mowing will only be used where other management techniques are not feasible.

- Mowing shall be applied in the spring prior to the nesting season (April 15) or during the month of August.
- After the stand is established mow no more than 50% of the stand in any given year. Mowing the whole stand may be necessary during the first two years of establishment for weed control.
- Mow in strips to maintain cover. Rotate mowed strips across the field from year to year.

- Minimum standing strip width shall be 30 feet. Strips 100 feet wide or wider are preferred for wildlife escape cover.
- To control woody vegetation, mow cool season grasses no shorter than 6 inches.
 Native warm season grasses should be mowed no shorter than 8 inches or no shorter than 10 inches if mowed near the end of the growing season.
- Residues from mowing shall be thoroughly shredded and evenly distributed to prevent excess litter accumulation.

<u>Prescribed Burning</u> – Burning may be required to remove excess litter, stimulate germination of seed bearing annuals, increase plant species diversity, control unwanted woody and herbaceous vegetation, and open up the stand for movement of small animals and birds.

- Prescribed Burning can only be planned by qualified personnel according to criteria in the Prescribed Burning (338) standard.
- Frequency of burning will not exceed once every third year.
- Burn no more than one third of the area in any one year. However, exceptions can be made to burn up to 50 percent of an area in cases of small fields, and when weather conditions have prevented burning in previous years.
- See Prescribed Burning Fact Sheet 647FS for more information and specifications.

<u>Prescribed Grazing</u> - Domestic livestock may be used to manipulate plant succession. Grazing requires very careful management to assure the site is not over grazed.

 A grazing plan (meeting criteria in conservation practice standard Prescribed Grazing (528)) will be developed for the intended purpose of the practice.

Woodland Edge Feathering - Woodland edges can be managed for early successional habitat through vegetation manipulation.

 Thin overstory trees in the first 60 to 90 feet of the woodland edge. The regrowth and sprouting that result will provide benefits for 5 to 10 years. Invasive species must be controlled before the overstory is thinned.

NRCS, Illinois April 2011

- To develop early successional habitat adjacent to woodland, allow natural revegetation of native shrubs, brambles, grasses and forbs along a woodland edge to develop an area of early successional habitat at least 30 feet in width. Invasive species in the area must be controlled before allowing natural revegetation. Protect the area from disturbance until established.
- Early successional habitat along woodland edges can also be created by planting shrubs and grasses in the open field along a woodland. Plant at least 2 rows of shrubs along the woodland and a field border of grasses and forbs along the cropland edge to make up an area with a total width of at least 30 feet.
- When more than 50% of the trees in the woodland edge become taller than 15 feet high, reapply the practice.
- See Woodland Edge Feathering Job Sheet 645D for more information and specifications.

CONSIDERATIONS

The practice should be applied periodically to maintain the desired early successional plant community and rotated throughout the managed area.

Design and install the treatment layout to facilitate:

- operation of machinery
- use of natural firebreaks or development and maintenance of firebreaks when prescribed burning.

When selecting plants and designing management for the practice, consider the needs of pollinators and incorporate to the maximum extent practicable.

Managing for early successional plant communities is beneficial if not essential for less mobile animal species. The less mobile the species must have all of the required habitat elements within the small area where they live.

Consider operation of machinery used on the site in the layout and design of firebreaks.

Whenever possible, lay out strips to have some multiple or full width passes by all farm implements.

PLANS AND SPECIFICATIONS

Written specifications, application schedules and maps shall be prepared for each site. Specifications shall identify the amounts and kinds of habitat elements, locations and management actions necessary to achieve management objectives.

Specifications shall be transmitted to clients using approved specification sheets, job sheets, and customized practice narratives or by other written documentation approved by NRCS.

OPERATION AND MAINTENANCE

The following actions shall be carried out to insure that the practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice.

Occasional disturbance may be incorporated into the management plan to ensure the intended purpose of the practice.

Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose.

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NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

PRESCRIBED BURNING

(Acres) CODE 338

DEFINITION

Controlled fire applied to a predetermined area.

PURPOSES

- · Control undesirable vegetation.
- Prepare sites for harvesting, planting or seeding.
- · Control plant disease.
- Reduce wildfire hazards.
- Improve wildlife habitat.
- Improve plant production quantity and/or quality.
- · Remove slash and debris.
- Enhance seed and seedling production.
- Facilitate distribution of grazing and browsing animals.
- · Restore and maintain ecological sites.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on all lands as appropriate.

CRITERIA

General Criteria Applicable to All Purposes

Cooperators will be cautioned to burn in accordance with applicable federal, state, and local laws and regulations. They must understand that they may be liable for damages caused by fire escaping from their land or for damage caused to others from inadequate smoke management. They may also be responsible for fire suppression cost, should the fire escape the designated area.

The procedure, equipment, and the number of trained personnel shall be adequate to accomplish the intended purpose.

The expected weather conditions, human and vehicular traffic that may be impeded by heat or smoke, liability (e.g., utility lines) and safety and health precautions shall be integrated into the timing, location and expected intensity of the burn.

Burn crew shall wear clothing of fire retardant or natural materials (Nomex, cotton, wool, leather gloves and leather boots, etc.) including long sleeved shirt, long pants, hard hat (if burning in forest, shrub or woodland), gloves, high top boots and eye protection.

All persons working on a prescribed burn must be physically capable of performing the activities associated with prescribed burning.

Timing of burn will be commensurate with soil and site conditions to maintain site productivity and minimize effects on soil erosion and soil properties (i.e., structure, soil moisture).

Weather parameters and other data that affect fire behavior should be monitored during the burn. Carbon release should be minimized by the timing and burn intensity.

Identify location of utilities such as electric power lines and natural gas pipelines to prevent damage to the utility and avoid personal injury.

Identify all expected and potential smoke impacts before the burn and continue monitoring during the burn.

All necessary permits must be obtained, including the IEPA Open Burning Permit, before implementation of the practice.

Cooperators without experience in burning will be advised to seek assistance from persons who have had training or experience in applying the practice.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service <u>State Office</u> or visit the Field Office Technical Guide.

The landowner or his/her designee must be on-site throughout the prescribed burn period. NRCS personnel will not serve as the landowner's designee.

Additional Criteria to Control Undesirable Vegetation

Specify applicable target species to be suppressed and potential of fire damage to non-target species on Illinois Job Sheet 338-JS, Section 2 - Purposes for Conducting the Prescribed Burn.

Time of burning to suppress deciduous woody species should be in late spring, when the target species have just fully leafed and carbohydrate reserves are at their lowest, or in late fall.

Coniferous species, such as cedar, should be burned after the herbaceous species to be improved starts growth. The best suppression on coniferous species is achieved when they are small, from one to three feet tall. Larger trees will need to be cut prior to burn for best control.

Frequency of burning should be based on regrowth of target species, weighed against forage and/or wildlife habitat considerations.

Additional Criteria to Improve Wildlife Habitat

Burning for maintenance of ungrazed wildlife areas or grass stands under long-term retirement programs, should be carried out once every three to four or more years, depending upon amount of litter accumulation and vigor of stand. Upland habitats with droughty soils have longer rotations than more productive wet mesic habitats.

Do not burn between April 15 and August 1 in areas likely to be utilized by ground nesting birds.

Specify wildlife preferred plant species to be improved or enhanced and potential of fire damage to other desirable species on Illinois Job Sheet 338-JS, Section 2, Purposes for Conducting the Prescribed Burn.

Time of burning should be just prior to or soon after dormancy break of wildlife preferred species in the spring. A good rule of thumb is to burn when the wildlife preferred species have no more than one inch of new growth.

Limited wildlife habitat in the area should dictate limiting the area to be burned to less than 1/2 of the total area managed for wildlife habitat of the habitat type being burned.

Additional Criteria to Improve Plant Production Quantity and/or Quality

Frequency of burning should not be more than once every three years, to stimulate vigor and production of warm-season grasses or to maintain diversity of mixed-grass communities.

Specify on the burn plan desired species to be maintained or restored. Time of burning should be just prior to or soon after dormancy break of desired species in the spring.

Generally, grass species are burned in spring when the desired grass has achieved 1" of new growth, usually from late February to late March for coolseason species and from early April to early May for warm-season species.

Additional Criteria to Facilitate Distribution of Grazing and Browsing Animals

Frequency of burning will be based on extent and duration of grazing responses, but should not be more than once every three years.

Grazing areas and desired species should be adjusted in relation to grazing pressure.

Time of burning should be just prior to or soon after dormancy break of desired species in the spring.

Additional Criteria to Restore and Maintain Ecological Sites (savanna and woodland communities)

Restoration of a savanna and/or reduction of aggressive nondesirable plants may require yearly or every other year burns for up to six years to open up the canopy, stimulate oak reproduction, and retard invader species. Once accomplished, limit burns to 5 to 15 year intervals for savannas.

Burn when desirable trees are dormant and more resistant to fire.

Keep flame lengths (scorch heights) less than 2 feet near the trunks of desirable trees. Fires with

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six foot scorch heights or higher will kill even larger (>11" diameter breast height (dbh)) oak trees.

Desirable oak saplings should be allowed to grow to 3-4" dbh before burning the area.

Dead wood left to burn can sterilize underlying soil for several years. Avoid burning brushpiles and downed logs by removing the material out of the burn area. Or, protect the dead wood with a firebreak and burn the area when conditions allow for a cooler fire and lower flame lengths to reduce the risk of igniting the dead wood.

CONSIDERATIONS

Prescribed Burning is not meant to be an annual management practice. Burn only to meet a specific management objective.

Precautions are needed to avoid air contamination from toxic substances or poisonous plants that may exist in an area to be burned. Smoke from burning poison ivy and other poisonous plants can be toxic to individuals and animals.

Burn when the vegetation to be burned is dry enough to carry a fire well, but while the soil surface is still damp to the touch. Good soil moisture helps to keep the soil temperature low during the burn.

Late fall and winter burns generally favors the forb component in mixed stands and is useful in improving wildlife habitat. However, fall and winter burns can leave the site vulnerable to erosion for long periods.

Additional Considerations for Reduction and Dilution of Emissions (smoke management)

Increase combustion efficiency using backing fires, burning dry fuels, use of burn piles or windrows and rapid mop-up.

Burn when conditions are good for dispersion of emissions (adequate atmospheric mixing height and sufficient transport wind speeds).

Reduce area burned by only burning concentrations of fuel, or mosaic burning, rather than 100% of the area.

Reduce fuel loading by burning more frequently, or by mechanical removal or processing of part of the fuel such as haying, grazing, biomass utilization and firewood sales.

Reduce fuel consumed by burning when non-target fuels are too moist or green to burn (wet large woody debris and moist litter and/or duff).

Schedule burn before new fuel is produced (before litter fall or green-up of vegetation).

PLANS AND SPECIFICATIONS

A detailed burn plan for the prescribed burn area must be prepared with the landuser, signed by the landuser, and approved according to policy prior to the burn. Illinois Job Sheet 338-JS Prescribed Burning Plan will be used for documentation if developed by trained NRCS employees. Other trained professionals may use Illinois Job Sheet 338-JS or another plan format that contains the same information as Illinois Job Sheet 338-JS.

Conditions for the fire prescription will be determined using the table entitled "Acceptable Conditions for Prescribed Burns," Section 4, in Illinois Job Sheet 338-JS, Prescribed Burn Plan. Relative humidity, wind speed, and temperature are specified in the table. Winds must be relatively steady in velocity and direction. If winds are gusty and/or shifting more than 45 degrees from the prevailing direction, conditions are out of prescription, regardless of other factors.

Particulate matter 2.5 (PM 2.5) Landusers conducting a prescribed burn near or within Non-Attainment Areas in Illinois (http://www.epa.gov/air/oaqps/greenbk/ilmo25.html) will monitor the Air Quality Index (http://www.epa.state.il.us/air/aqi/index.html) and delay burning if the Air Quality Index is "Orange" or worse.

Fuel load will be at least 2,500 pounds per acre of fine fuel (dry grass and litter) with at least 50% standing (except for heavy fuel loads). Fuel loads above 10,000 pounds per acre of fine fuels, under normal circumstances, will have high flames and require additional resources to conduct the burn safely. Fuel conditions will be documented in Section I., Description of Burn Area, in Illinois Job Sheet 338-JS.

Remove all volatile woody species over 4 feet in height within 50 feet of the primary firebreak. Where removal of certain trees is not feasible, branches will be pruned to at least 2 times the expected flame length and residues scattered to assure fire does not reach the canopy of these trees.

Soil moisture will be sufficient to ensure protection of root crowns and ensure plant regrowth following burning. Soil moisture will be moist to the touch.

Erosion control measures shall be planned to prevent sediment from leaving the site where bare ground firebreaks are established or the burned area is highly erodible with little vegetation response expected. See NRCS Conservation Practice Standards 327 Conservation Cover, or 342 Critical Area Seeding, for vegetation establishment and 655 Forest Trails and Landings, for techniques to control erosion where permanent firebreaks are installed in woodland.

Firebreaks will be utilized to contain fire in the area to be burned. Mechanical, chemical, wetline, burned, natural, or structural firebreaks will be used alone or in combination to contain the burn. Refer to NRCS Conservation Practice Standard 394 Firebreak, for design specifications for firebreaks.

Weather forecast will be obtained the day before the burn, the day of the burn and for the next 48-hour period.

Weather conditions on-site will be observed and recorded immediately before and during the burn. Burning will be postponed, if weather conditions are, or are expected to fall, outside of the Prescribed Burn Plan prescription. The burn plan must prescribe weather conditions for the burn within the parameters of Illinois Job Sheet 338-JS Part 4.

Weather fronts - do not burn 12 hours before the passage of a weather front or after a weather front passes until the wind direction becomes constant.

Smoke management - burns will be planned, where possible, so winds will carry smoke away from roads, highways, airports, and occupied residences. When burning within 1 mile of an airport, secure necessary permission from airport authorities. Where smoke could affect sensitive

areas, do not burn until adequate safeguards have been taken (traffic control, notification, removal of residents sensitive to smoke), and do not burn unless atmospheric conditions will allow for the rapid rise and dispersal of smoke (mixing height >1,600 feet and transport wind speed ≥9 mph). Do not burn during temperature inversions that could trap smoke in the lower atmosphere. See the National Weather Service Fire Weather Forecast for mixing height and wind transport speed forecast.

Electrical or high power transmission lines within or adjacent to the site will be documented and the burn plan designed and applied so that large fire fronts or high, dense smoke columns will not cross under or contact these lines. Electrical discharge can occur due to high concentrations of carbon particles suspended in smoke columns. Wooden utility poles must be protected from burning. Natural gas pipelines and other buried utilities will be documented and measures taken to protect the utilities and to avoid personal injury.

Hazards, such as roads, residences, windbreaks, woodlands, electrical power poles and transmission lines, fences, flammable conduits, pipelines, organic soils, etc., will be identified and indicated on the plan map.

Access to the burn area by all unauthorized personnel will be restricted.

Burning will occur during daylight hours only. Time mop-up operations so mop-up will be completed before sunset. Extinguish all fire before leaving the site.

Threatened and endangered species that may occur on site will be identified and protected from fire and smoke. For prescribed burns in woodland, follow conservation measures established for the protection of the Indiana bat, Federal endangered specie. If bald eagles are nesting in the area, follow conservation measures established for their protection. For more information, see Illinois Amendment 2 to the National Environmental Compliance Handbook.

Notify adjoining landowners, utility companies with facilities within the burn unit (overhead or underground), and residences and businesses within the first mile of the anticipated airshed prior

NRCS – Illinois January 2013 to burning. Notify airports, local fire department districts, and public safety officials with districts within one mile of the site. Also notify fire and safety district officials and airports within the one to five mile airshed prior to burning. Provide adequate signage to affected roads.

Prescribed Burning Specifications must adhere to all applicable NRCS policies in the General Manual (190 GM Part 413 Prescribed Burning) and Illinois supplements to the General Manual (190 - General Manual, Amend. IL-1) as well as all applicable state and local laws, ordinances, and regulations.

If the planner is not an NRCS employee and does not use the IL-338-JS to develop the burn plan, the plan must contain at a minimum the following:

- · Location and description of the burn area
- Pre-burn vegetation evaluation
- Resource management objectives
- Identify sensitive areas
- Required weather conditions for prescribed burn
- Notification checklist
- Pre-burn preparation
- Equipment checklist
- Personnel needs and job assignments
- · Safety requirements
- Burning and ignition method to be used
- Firing sequence
- Post-burn evaluation and management criteria
- Approval signatures
- Signature by the landowner that they have been notified that they are liable for any damages as result of the prescribed burn.

Landowner or land operator will obtain necessary approval, permits, and variances prior to conducting the prescribed burn.

The Prescribed Burn Plan is specific to the area and for the burning season planned. If the plan is to be used for a subsequent burn season the plan will be revised to address the current situation.

OPERATION AND MAINTENANCE

The kinds and expected variability of site factors (e.g., fuel condition and moisture content, weather conditions, human and vehicular traffic that may be impeded by heat or smoke, liability, and safety and health precautions) shall be monitored during the operation of this practice. Sufficient fire suppression equipment and personnel shall be available commensurate with the expected behavior of these factors during the time of burning to prevent a wildfire or other safety, health or liability incident.

To achieve benefits of the prescribed burn, other practices in a Conservation System need to be carried out as planned.

Under poor growing conditions, low plant vigor, and/or downward trend, range or pasture will require one full growing season of deferment from grazing, or incorporation into a prescribed grazing system.

Under good growing conditions and good plant vigor, grazing can begin as soon as cool-season grasses attain 6 to 8 inches of new growth and warm-season grasses attain 10 to 12 inches.

PERFORMANCE CRITERIA

The practice will be completed when the prescribed burn has been carried out according to the design specifications and the desired resource management objectives have been achieved or identified resource problems have been solved.

REFERENCES:

Open Burning, IL. Admin. Code, Title 35, subtitle B, Chapter I, Subchapter I, Part 237. See Subchapter I, Open Burning, at

http://www.ipcb.state.il.us/documents/dsweb/Get/Document-11987/

Illinois Evironmental Protection Agency – Opening Burning

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<u>Prescribed Burning Guidelines in the Northern</u>

<u>Great Plains</u>. U.S. Fish and Wildlife Service

Publication EC 760. 36 pp. http://www.npwrc.usgs.gov/resource/habitat/burnin g/index.htm

Smoke Management Guide for Prescribed and Wildland fire 2001 Edition. 2001. National Wildfire Coordination Group Fire Use Working Team. http://www.nwcg.gov/pms/pubs/SMG/SMG-72.pdf

Natural Resources Conservation Service

ILLINOIS CONSERVATION PRACTICE STANDARD

FOREST STAND IMPROVEMENT

(Acre)

CODE 666

DEFINITION

The manipulation of species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation.

PURPOSES

- To increase the quantity and quality of forest products, e.g., sawtimber, veneer, wood fiber, poles, pilings, maple syrup, naval stores, nuts and fruits.
- To harvest forest products.
- To initiate forest stand regeneration.
- To reduce the potential of damage from wildfire, pests, and moisture stress.
- To restore natural plant communities.
- To achieve a desired understory plant community.
- To improve aesthetic, recreation, and open space values.
- To improve wildlife habitat.
- To improve water conservation and yield.
- To achieve a desired level of crop tree stocking and density.
- To increase carbon storage in selected crop trees.

CONDITIONS WHERE PRACTICE APPLIES

On forestland where competing vegetation hinders development and stocking of preferred tree and/or understory species or where some of the stand will be cut or killed for intended purposes.

CRITERIA

General Criteria Applicable to All Purposes

The harvest-regeneration strategy will be identified for all planned forest improvement harvesting:

- Uneven-aged management systems (singletree selection, group selection, coppice selection)
- Even-aged management (clear-cut, seedtree, shelterwood, coppice)

Preferred tree and understory species are identified and retained to achieve all planned purposes.

Spacing, density, size class, number, and amounts of trees and understory species to be retained will follow established guidelines for the intended purposes.

Stocking guidelines shall contain stocking in terms of crop trees, basal area, and/or trees per acre by species and size class distribution. For detailed information on crop tree selection and management see Plans and Specifications.

The method, felling direction and timing of tree cutting for harvesting shall facilitate efficient and safe tree removal and protect sensitive areas such as wetlands, riparian zones, cultural resources, and structures.

Forest stand improvement activities shall be performed to minimize soil erosion, compaction, rutting, damage to remaining vegetation and hydrologic conditions. For more information see practice standard FOREST TRAILS AND LANDINGS (655).

Slash and debris left on the site after treatment will not present an unacceptable fire, safety, environmental, or pest hazard. Such remaining material will not interfere with the intended purpose or other management activities.

Comply with applicable federal, state and local laws and regulations during the installation, operation and maintenance of this practice. Appropriate cultural resources review will be conducted before beginning any practice that results in soil disturbance.

Additional Criteria to Increase the Quantity and Quality of Forest Products

For species to retain for timber production see "Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types" in References.

Crop trees to retain will be dominant or codominant, at least 25 feet tall, have a full, healthy crown, seedling origin or stump sprout originating within 6 inches of the ground, no epicormic branches on the lower stem, not leaning, without narrow-angled or low forks and an expected longevity of at least 20 years.

Kill any vines growing on crop trees intended for timber production. See <u>Controlling Undesirable Trees</u>, <u>Shrubs</u>, <u>and Vines in Your Woodland</u> in References. Apply the "cut stump" technique to prevent vines from resprouting.

Additional Criteria to Restore Natural Plant Communities

For more information on restoration of natural communities see practice standards RESTORATION AND MANAGEMENT OF DECLINING HABITATS (643) and WETLAND RESTORATION (657) and References.

Additional Criteria to Improve Aesthetic Recreation and Open Space Values

Crop trees to retain will be species that produce attractive flowers and/or colorful foliage, healthy crowns, good fall color, visible from travel ways or waterways, expected to live 20 years or more, possessing unique form or bark characteristics, having historical significance, or of particular interest to the landowner.

For additional guidelines refer to RECREATION AREA IMPROVEMENT (562) and RECREATIONAL TRAIL AND WALKWAY (568).

Additional Criteria to Improve Wildlife Habitat

For tree and shrub species to retain see HEDGEROW PLANTING (422).

Crop trees to retain will be dominant or codominant, have a full, healthy crown, a mast (fruit, seed or nut utilized as food by wildlife) producer and/or possessing a cavity or the potential for developing a cavity.

Retain all vines as a food source for wildlife.

Retain or create at least 3 brush piles per acre with material produced during improvement work. Hinged, partially cut "living brushpiles" should be included to provide long-lasting shelter. Brush piles are most effective near habitat edges rather than in the interior of a forested tract. Brush piles will need to be protected by a temporary, raked firebreak if prescribed burning is planned.

Low intensity prescribed fires may be used to improve/increase green browse for wildlife. Refer to practice standard PRESCRIBED BURNING (338). A prescribed burn plan (Job Sheet 338-JS) will be prepared and implemented by individuals possessing the appropriate level of Job Approval Authority.

CONSIDERATIONS

Silvicultural objectives and harvest-regeneration strategies may change over time and may be limited by prior management.

Successful regeneration of desirable species is usually dependent upon timely application of forest stand improvement and other practices, e.g., PRESCRIBED BURNING (338), FOREST SITE PREPARATION (490), TREE/SHRUB ESTABLISHMENT (612), PRESCRIBED GRAZING (528A), and USE EXCLUSION (472).

The extent, timing, size of treatment area, or the intensity of the practice should be adjusted to minimize cumulative effects (onsite and offsite), e.g., hydrologic and stream alteration, habitat fragmentation, nutrient cycling, biodiversity and visual resources.

NRCS, Illinois

July 2002

Potential landowner and operator liability should be assessed before forest stand improvement activities begin.

The practice should be timed to minimize disturbance of seasonal wildlife activities.

Consider wildlife food and cover needs when making modifications to forest composition and tree spacing.

Consider retention of selected dead and dying trees, including down material, to enhance wildlife habitat values.

Landowners should secure a written contract with any service provider that specifically describes the extent of activity, duration of activity, responsibilities of each party and amount and timing of payments for services provided.

Landowners planning to sell timber should: know the amount of timber to be sold through an inventory, receive sealed bids, obtain a signed contract with an Illinois licensed timber buyer, receive full payment before cutting begins, and supervise harvest operations. For further information and sample contracts see Here's How to...Write an Iron-Clad Timber Sale Contract in References.

Best results are often obtained by retaining the services of a professional forester to conduct forestry practices, particularly the sale of timber.

Consider environmental concerns such as threatened and endangered species and natural areas.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.

Selection and Management of Crop Trees

Crop trees are individual trees selected according to criteria that is based on species, form, crown size and position and other physical characteristics. Crop tree selection criteria have been developed for specific purposes such as timber production, wildlife habitat, water quality

and aesthetics (see <u>Crop Tree Management in</u> <u>Eastern Hardwoods</u> in References).

Crop trees may be selected and released when a height of 25 feet or more or a diameter at breast height (dbh) of 4 inches is reached, which is usually at age 10 to 15 years. In most cases 50 to 75 crop trees will be released per acre. Landowner objectives and stand quality may result in as few as 5 to 20 crop trees released per acre, but never more than 100 trees per acre.

A crop tree inventory will provide an estimate of the number of crop trees and trees needing to be cut or killed per acre for planning purposes. Guidelines for conducting an inventory and completing a Crop Tree Tally Sheet can be found in Crop Tree Management in Eastern Hardwoods in References. Data collected should include species and dbh for both crop trees and trees to be killed or cut. For crop trees, record the criteria used for crop tree selection (e.g. timber, wildlife, water quality, and/or aesthetics).

After selecting and marking crop trees a "crown touching" release is performed by cutting or killing only those adjacent trees whose crowns touch the crown of the crop tree. It is not necessary to cut or kill trees that are overtopped by a crop tree, unless it is a large shade tolerant tree (sugar maple, basswood, beech) that may grow up into the crown of the crop tree.

In areas within a stand of trees where there are no suitable crop trees, do not cut any trees. In most cases crop trees will be at least 25 feet apart. Occasionally two crop trees may be left close to each other. Treat their crowns as a single crown and apply a crown-touching release.

Unwanted trees, shrubs and vines may be killed by any of the following means; cutting, girdling, frilling, stem injection, or basal bark spray. Foliar sprays can be used for small trees. For specific information about techniques for killing trees, including recommend herbicides, see Controlling Undesirable Trees, Shrubs, and Vines in Your Woodland in References.

In some instances, enough trees of suitable size may be cut to warrant a commercial timber sale.

Harvesting Timber to Improve Forestlands

Forestland may be in need of improvement due to past management practices such as improper grazing, poor cutting practices (high-grading), wildfire or a combination of the above. Many unmanaged forest stands become overstocked with shade tolerant tree species (sugar maple and/or American beech) or shrub species (pawpaw, honeysuckle, buckthorn), preventing regeneration of more desirable light demanding species. Often the best way to improve a forest stand is to selectively harvest some timber focusing on the removal of less desirable trees. Creating openings in the forest canopy will result in natural regeneration of desired tree species. Size of openings may range from one-half acre to about 5 acres in size. For detailed information on harvesting timber to improve and regenerate forestlands see Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

OPERATION AND MAINTENANCE

Periodic inspections during treatment activities are necessary to ensure that objectives are achieved and resource damage is minimized. Follow-up and ongoing management activities will be needed to obtain desired results. See Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

Crop tree release or forest stand improvement cutting may be repeated at 5 to 15 year intervals depending on site type and site quality. See Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

REFERENCES

Controlling Undesirable Trees, Shrubs and Vines in your Woodland. Ohio St. Univ. Exten. Pub. F-45. http://ohioline.osu.edu/forfact/0045.html

Crop Tree Management: A Tool to Help You Achieve Your Woodland Goals. Ohio St. Univ. Exten. Pub. F-50-02, 2002. http://ohioline.osu.edu/for-fact/0050.html

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Forestry Best Management Practices for Illinois. IL Dept. of Nat. Res., So. IL. Univ., Univ. of IL, & IL for. Dev. Council, 2000.

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Keeping the Forest Healthy and Productive. In: A Landowner's guide to Sustainable Forestry in Indiana. Purdue Univ. Exten pub. FNR-182, 2002.

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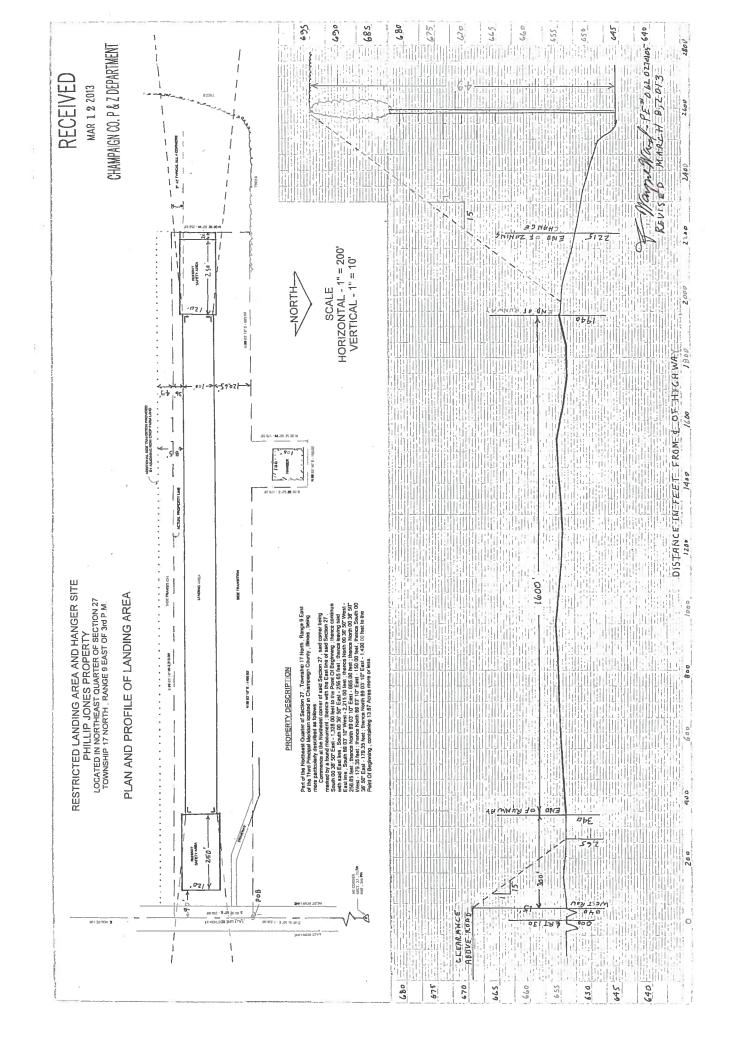
Recommended Silviculture and Management
Practices for Illinois Hardwood Forest Types, IL
Technical Forestry Asso. 1972, 46 pp.
http://ilvirtualforest.nres.uiuc.edu/page4.html

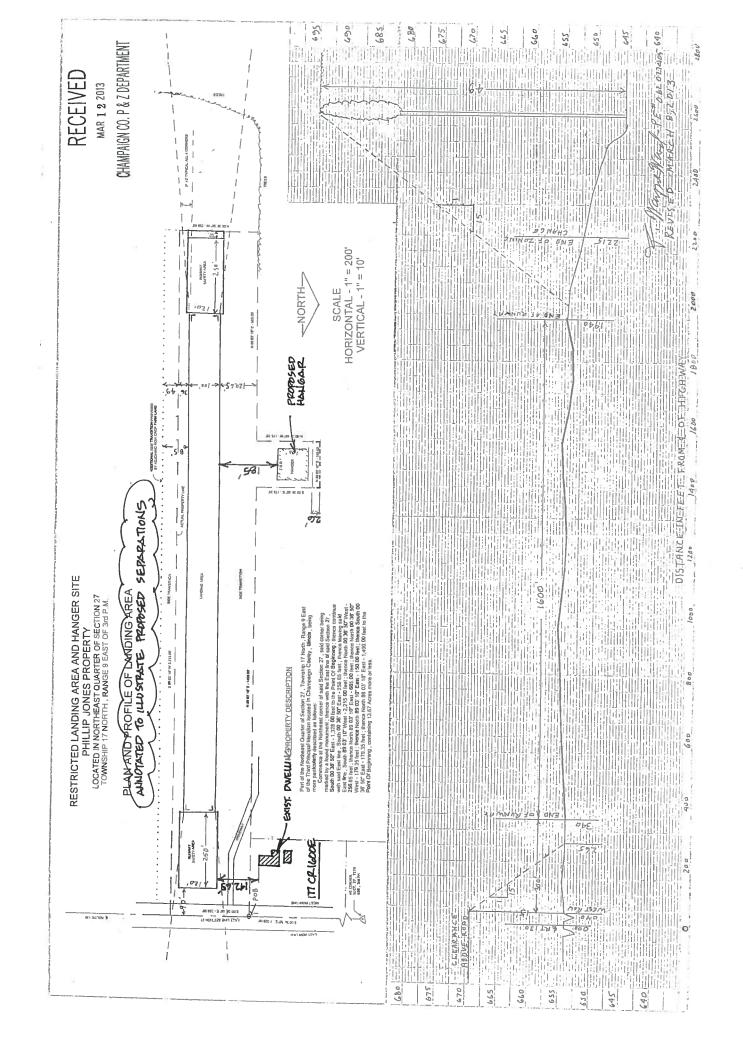
<u>The Tallgrass Restoration Handbook: For Prairies, Savannas, and Woodlands.</u> Packard, S. and C.E. Mutel, Island Press, 1997.

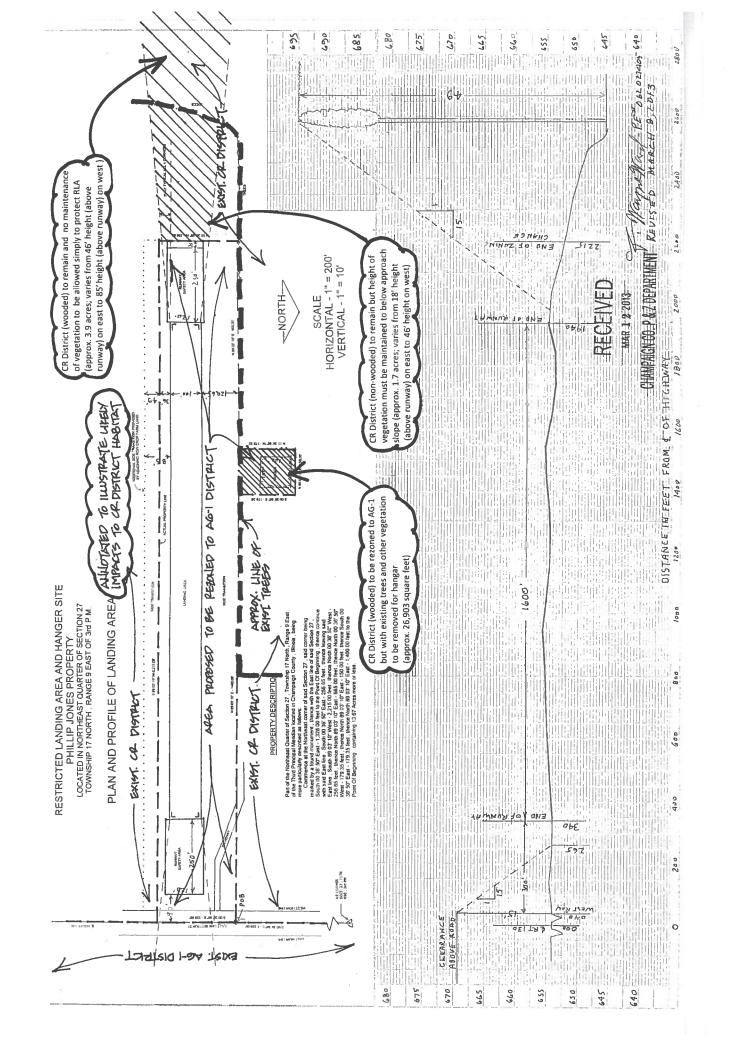
GIS Webmap Public Interface Champaign County, Illinois

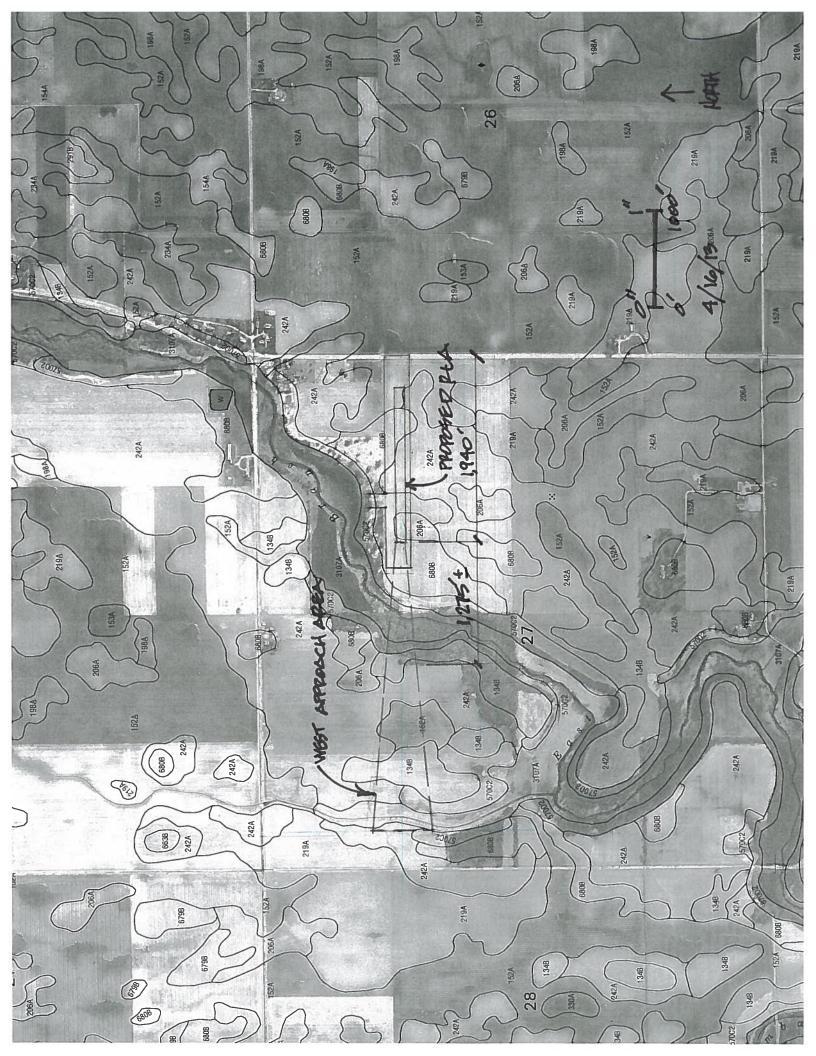


guarantee the accuracy or suitability of GIS data for any purpose. The GIS data within this application is intended to be used as a general index to spatial information and not intended for detailed, site-specific analysis This map application was prepared with geographic information system (GIS) data created by the Champaign County GIS Consortium (CCGISC), or other CCGISC member agency. These entities do not warrant or or resolution of legal matters. Users assume all risk ansing from the use or misuse of this application and information contained herein. The use of this application constitutes acknowledgement of this disclaimer.









LIKELY IMPACTS ON SCENIC AND NATURAL AREAS IN THE CR DISTRICT

Item 8.T. in the Summary of Evidence for Case 688-S-11 reviews the evidence regarding the impacts to the natural and scenic areas in the CR District caused by the proposed RLA.

Regarding the impact to habitat on the 1.7 acres of CR District located at the west end of the proposed RLA and underneath the "Approach Area" required by IDOT, alternatives are as follows:

A. This area is not currently wooded and it appears that it was only partially wooded in the Supervisor of Assessments 1973 aerial photograph. The proposed RLA will have **LITTLE TO NO IMPACT** on the scenic and natural qualities of the CR District and therefore no special condition is warranted. (Note: This paragraph could be added as item 8.T.(3) in the Summary of Evidence for Case 688-S-11 and added to item 18.A. in the Finding of Fact for Case 687-AM-11.)

- OR-

B. This area is not currently wooded and it appears that it was only partially wooded in the Supervisor of Assessments 1973 aerial photograph. However, the proposed RLA will limit the allowable height of vegetation on this portion of the property and therefore the proposed RLA will have a **SIGNIFICANT IMPACT** on the scenic and natural qualities of the CR District and the following special condition is warranted (Note that the following special condition is just one example of how this impact could be mitigated):

The petitioner shall re-establish native vegetation in the 1.7 acre area at the end of the proposed RLA consistent with Natural Resources Conservation Service guidelines and methods.

The above condition is necessary to ensure the following:

The impact of the special use permit on the scenic and natural qualities of the CR District shall be mitigated to the extent possible.

(Note: The above paragraph (with the exception of the special condition) could be added as item 8.T.(3) in the Summary of Evidence for Case 688-S-11 and also added to item 18.A. in the Finding of Fact for Case 687-AM-11. The special condition should be included in item 13. of the Summary of Evidence for Case 688-S-11.)

Regarding the impact to the 30,750 square feet (.706 acre) portion of the CR District that is currently wooded and is proposed to be rezoned to the AG-1 District for the construction and development of the proposed hangar, alternatives are as follows:

A. This area is only .706 acre in area and the quality of the existing habitat has not been established and the petitioner has already planted 2,500 trees on the subject. The loss of this habitat due to the proposed RLA will have **LITTLE TO NO IMPACT** on the scenic and natural qualities of the CR District and therefore no special condition is warranted. (Note: This paragraph could be added as item 8.T.(4) in the Summary of Evidence for Case 688-S-11 and added to item 18.A. in the Finding of Fact for Case 687-AM-11.)

- OR-

Attachment J. Likely Impacts On Scenic And Natural Areas In The CR District APRIL 17, 2013

B. This area is only .706 acre in area and the quality of the existing habitat has not been established but this is not the only possible location for a hangar and the fact that petitioner has already planted 2,500 trees on the subject will not mitigate the loss of this existing woodland habitat. The loss of this habitat due to the proposed RLA will have a **SIGNIFICANT IMPACT** on the scenic and natural qualities of the CR District and no special condition can adequately mitigate this unnecessary impact.

- OR-

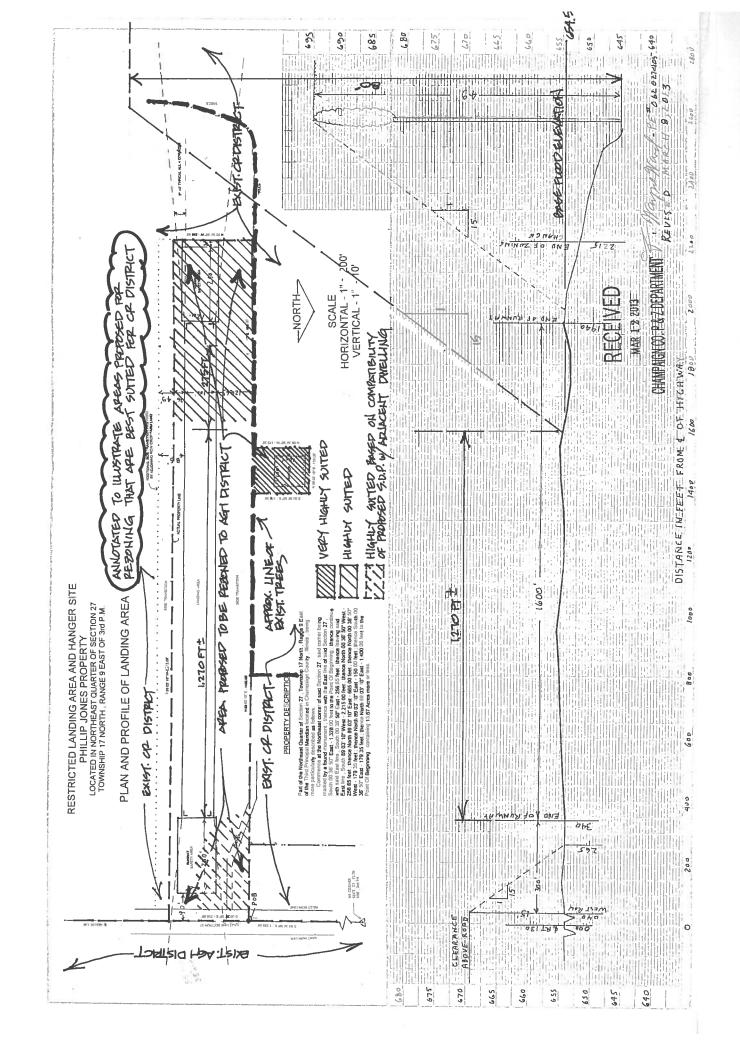
C. This area is only .706 acre in area and the quality of the existing habitat has not been established but this is not the only possible location for a hangar and the fact that petitioner has already planted 2,500 trees on the subject will not mitigate the loss of this existing woodland habitat. The loss of this habitat due to the proposed RLA will have a **SIGNIFICANT IMPACT** on the scenic and natural qualities of the CR District. The following special condition may help mitigate this unnecessary impact:

The petitioner shall establish at least 1.4 acres of woodland habitat vegetation in an area that is not current wooded on the subject property in a manner consistent with Natural Resources Conservation Service guidelines and methods.

The above condition is necessary to ensure the following:

The impact of the special use permit on the scenic and natural qualities of the CR District shall be mitigated to the extent possible.

(Note: The above paragraph (with the exception of the special condition) could be added as item 8.T.(3) in the Summary of Evidence for Case 688-S-11 and also added to item 18.A. in the Finding of Fact for Case 687-AM-11. The special condition should be included in item 13. of the Summary of Evidence for Case 688-S-11.)



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688-S-11

SUMMARY OF EVIDENCE, FINDING OF FACT AND FINAL DETERMINATION

of

Champaign County Zoning Board of Appeals

Final Determination: {APPROVED/ APPROVED WITH CONDITIONS/ DENIED}

Date: April 25, 2013

Petitioners:

Philip W. and Sarabeth F. Jones

Request:

Authorize the construction and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and also for helicopter use for public safety assistance as needed and with limited helicopter use for personal use, as a Special Use on land that is proposed to be rezoned to the AG-1 Agriculture Zoning District from the current CR

Conservation Recreation Zoning District in related Zoning Case 687-AM-11; and with a waiver of a Special Use standard condition required by Section 6.1 that

requires compliance with Footnote 11 of Section 5.3.

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SUMMARY OF EVIDENCE

From the documents of record and the testimony and exhibits received at the public hearing conducted on June 16, 2011, August 11, 2011, November 10, 2011, May 31, 2012, August 16, 2012, December 13, 2012, March 14, 2013, and April 25, 2013, the Zoning Board of Appeals of Champaign County finds that (Note: asterisk indicates items of evidence that are identical to evidence in Case 688-S-11):

- *1. The petitioners Philip W. and Sarabeth F. Jones own the subject property.
- *2. Regarding the subject property where the special use is proposed to be located:
 - A. The subject property is an approximately 12.69 14 acre tract of land that is located in the North Half of the South Half of the Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois Route 130 (CR1600E) and 1,328 feet south of the intersection of Illinois Route 130 and CR 200N and County Highway 16 and commonly known as the property at 175N CR1600E, Villa Grove.
 - B. The subject property is directly south of and abuts the petitioner's approximately 37.80 acre residential / agricultural property that is also located at 175N CR1600E, Villa Grove.
- *3. The subject property is not located within the one and one-half mile extraterritorial jurisdiction of a municipality with zoning.

GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY

- *4. Land use and zoning on the subject property and in the vicinity are as follows:
 - A. The subject property and the petitioner's adjacent residential/ agricultural property are currently zoned CR Conservation Recreation and are in use as a residential property with horses and pasture.
 - B. Land on the north, south, and west of the petitioner's adjacent residential/agricultural property is also zoned CR Conservation Recreation and is in use as follows:
 - (1) Land on the north has been divided into residential lots. Most of these lots were formerly part of the petitioner's residential/ agricultural property and two of those lots are now owned by others.
 - (2) The residential lots on the north also occupy most of the west boundary but some of the land bordering on the west is the wooded bottomland for the East Branch of the Embarras River.
 - C. Zoning and land use east of the petitioner's adjacent residential/agricultural property and north of the subject property is as follows:
 - (1) Land to the east of the subject property is zoned AG-1 and is in use as farmland.

(2) Land east of the petitioner's adjacent residential/agricultural property and north of the subject property is zoned CR and has been divided into residential lots. The dwelling on the nearest lot is only approximately 107 142.65 feet from the easternmost Runway Safety Area for the proposed RLA.

GENERALLY REGARDING THE PROPOSED SPECIAL USE

- 5. Regarding the proposed RESTRICTED LANDING AREA (RLA):
 - A. The revised Plan and Profile of Landing Area (revised site plan) received November 19, 2012, March 12, 2013, includes the following:
 - (1) A $100^{\circ} \times \frac{1640^{\circ}}{1600^{\circ}}$ runway proposed to be located 85 $\underline{120.65}$ feet south of the north property line.
 - (2) A 120' × 250' runway safety area at the east and west end of the runway. The east runway safety area is 90 feet from the centerline of Route 130 and 75 110.65 feet from the north property line. The west runway safety area will have a rear yard of 25 feet.
 - (3) Threshold markings at the east and west end of the runway.
 - (4) A 100' × 100' hangar north of the runway on the adjacent property.
 - (5) The driveway off of Route 130 that leads to the petitioner's residence on the adjacent property.
 - (6) Two 85' One 120.65 feet wide side transition on the north and one 85 feet wide side transition on the south side of the runway. The south side transition is not entirely on the petitioner's property, 13.35 49 feet will be on the adjacent property.
 - B. The amended request is for construction and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and also for helicopter use for public safety assistance as needed and with limited helicopter use for personal use.

GENERALLY REGARDING SPECIFIC ORDINANCE REQUIREMENTS

- 6. Regarding authorization for a "RESTRICTED LANDING AREA" as a Special Use in the AG-1 Zoning District in the *Zoning Ordinance*:
 - A. Section 5.2 authorizes a "HELIPORT- RESTRICTED LANDING AREA" as a Special Use in the AG-1, AG-2, B-1, B-3, B-4, I-1, and I-2 Districts. A RESTRICTED LANDING AREA is not authorized in the CR District.
 - B. Section 6.1.3 establishes the following standard conditions for RESTRICTED LANDING AREAS:

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Item 6.B. (continued)

- (1) Must meet the requirements of the Federal Aviation Administration and Illinois Department of Transportation, Division of Aeronautics.
- (2) The RESTRICTED LANDING AREA shall provide for a runway plus a runway safety area both located entirely on the LOT. The runway safety area is an area centered 120 feet wide and extending 240 feet beyond each end of the runway.
- (3) No part of a BUILDING or STRUCTURE intended for regular human occupancy located within a R or B District nor any PUBLIC ASSEMBLY or INSTITUTIONAL USE may be located:
 - (a) Within the Primary Surface, an area 250 feet wide centered on the runway centerline and extending 200 feet beyond each end of the runway; or
 - (b) Within the Runway Clear Zones, trapezoidal areas centered on the extended runway centerline at each end of the Primary Surface, 250 feet wide at the end of the primary surface and 450 feet wide at a point 1,000 feet from the primary surface.
- (4) After a RESTRICTED LANDING AREA is established, the requirements in Section 4.3.7 and Table 5.3 note (12) shall apply.
- C. Ordinance No. 848 (Zoning Case 634-AT-08 Part A) was adopted on May 21, 2009, and added requirements for wind farms to the *Zoning Ordinance*. Part of those requirements included a 3500 feet separation between any wind turbine tower and an RLA.
- D. The following definitions from the *Zoning Ordinance* are especially relevant to the requested Special Use Permit (capitalized words are defined in the Ordinance):
 - (1) "AIRCRAFT" is any contrivance now known or hereafter invented, used or designed for navigation of or flight in the air.
 - (2) "RESTRICTED LANDING AREA" is any area described or defined as a Restricted Landing Area under the *Illinois Aviation Safety Rules* (92 *Ill. Admin. Code* Part 14) and as further regulated by the Illinois Department of Transportation, Division of Aeronautics.
 - (3) "SPECIAL CONDITION" is a condition for the establishment of the SPECIAL USE.
 - (4) "SPECIAL USE" is a USE which may be permitted in a DISTRICT pursuant to, and in compliance with, procedures specified herein.
- E. Section 9.1.11 requires that a Special Use Permit shall not be granted by the Zoning Board of Appeals unless the public hearing record and written application demonstrate the following:
 - (1) That the Special Use is necessary for the public convenience at that location;

- (2) That the Special Use is so designed, located, and proposed as to be operated so that it will not be injurious to the DISTRICT in which it shall be located or otherwise detrimental to the public welfare;
- (3) That the Special Use conforms to the applicable regulations and standards of and preserves the essential character of the DISTRICT in which it shall be located, except where such regulations and standards are modified by Section 6.
- (4) That the Special Use is in harmony with the general purpose and intent of this ordinance.
- (5) That in the case of an existing NONCONFORMING USE, it will make such USE more compatible with its surroundings.
- F. Paragraph 9.1.11.D.2. states that in granting any SPECIAL USE permit, the BOARD may prescribe SPECIAL CONDITIONS as to appropriate conditions and safeguards in conformity with the Ordinance. Violation of such SPECIAL CONDITIONS when made a party of the terms under which the SPECIAL USE permit is granted, shall be deemed a violation of this Ordinance and punishable under this Ordinance.
- G. A proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Waivers of standard conditions are subject to findings (1) that the waiver is in accordance with the general purpose and intent of the ordinance and (2) will not be injurious to the neighborhood or to the public health, safety, and welfare.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS NECESSARY FOR THE PUBLIC CONVENIENCE AT THIS LOCATION

- 7. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use is necessary for the public convenience at this location:
 - A. The Petitioner has testified on the application as follows:

"As applicant is engaged in a number of agricultural activities, the SUP should be granted because "uses can and should be accommodated in rural areas if they compliment agriculture, or supplement farm income" (1.6 Land Use Regulatory Policies). Applicant owns 130 acres farmed in corn and beans, grows sunflowers, soybeans, sugar beets, alfalfa, etc., and uses the helicopter to pollinate; provides crop tours for farmers from the U.S. and abroad; has a contract with a seed dealer. In addition, public convenience would be served by the special use because the applicant has offered to provide and has provided law enforcement and public safety assistance free of cost to the Champaign and Douglas County Sheriff's Office and Emergency Management (see the attached letters). The applicant has provided such assistance free of cost using both the helicopter and aircraft."

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Item 7.(continued)

- B. Letters of support for the proposed RLA were received from both Dan Walsh, Champaign County Sheriff, and Charlie McGrew, Douglas County Sheriff, and Bill Keller, former Champaign County Emergency Management Director. The Sheriff letters from cite the many instances when the Petitioner has provided flying service assistance in public emergency situations. None of those letters suggested anything about the various zoning issues related to impact on the immediate neighborhood but each letter make clear that having both the fixed wing (airplane) and helicopter assets conveniently available could be very valuable and an additional public safety benefit to both counties.
- C. At the June 16, 2011, public hearing the Petitioner testified that the majority of the farmland that the Petitioner owns is over 100 acres of farmland in Douglas County but that land is divided by a road and a river and does not have adequate length for an RLA and that land is 20 minutes away from his home.
- D. At the August 11, 2011, public hearing the Petitioner testified that having the RLA at this location would save him the 45 minute ordeal for him to get to where his helicopter is currently based and it creates a huge difference in response time versus the 10 minutes at the proposed location.
- E. The evidence in related Case 687-AM-11 for Policy 4.2 established that the proposed Special Use is a service better provided in a rural area than in an urban area.

GENERALLY REGARDING WHETHER THE SPECIAL USE WILL BE INJURIOUS TO THE DISTRICT OR OTHERWISE INJURIOUS TO THE PUBLIC WELFARE

- 8. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use be designed, located, and operated so that it will not be injurious to the District in which it shall be located, or otherwise detrimental to the public welfare:
 - A. The Petitioner has testified on the application, "The total dimensions of the SUP zone are 2,080 feet in length and 256.65 feet in width, thus satisfying all IDOT requirements: length of runways, 1,600.00 feet, width of 100.00 feet, side transitions and safety areas. Obstruction clearance requirements are satisfied as only low crops grow on the sides of the runway. There is 750.00 feet clearance from the trees on the West side and 240.00 feet from the Route 130 on the East side. The Heliport-RLA requirements are also met: TLOF and FATO areas of 100 square feet, and minimum obstruction clearance slope of more than 500.00 feet and 4,000.00 feet on each side (see the attached RLA plans)."
 - B. The Champaign County Soil and Water Conservation District prepared a Natural Resource Report and the report can be summarized as follows:
 - (1) The area to be developed had two soil types that have severe ponding characteristics.
 - (2) The site is subject to flooding and would not be usable as a landing site when flooded.

- (3) The subject property has an LE factor of 84 and is not considered Best Prime Farmland.
- (4) Soil erosion could be a problem during the construction stages of the proposed hangar. A perimeter berm could be built around the construction site on the hangar to control runoff and erosion.
- (5) Wetness may be a limitation associated with the soils on this site. Installing a properly designed subsurface drainage system will minimize adverse effects.
- (6) Water quality should not be impacted as long as adequate erosion and sedimentation control systems are installed.
- C. Regarding surface drainage:
 - (1) The subject property is not located in a drainage district.
 - (2) The existing amount of impervious area on the subject property does not trigger any requirement for stormwater detention under the *Champaign County Stormwater Management Policy*, and no new impervious area is proposed as part of the RLA.
- D. The subject property is located on the west side of Illinois 130 approximately ¼ mile south of the intersection with CR200N and County Highway 16. The subject property is accessed from Illinois 130 from an existing driveway entrance. It is very unlikely that the proposed Special Use will result in any increase in highway traffic.
- E. Regarding fire protection of the subject property:
 - (1) The subject property is within the protection area of the Broadlands- Longview Fire Protection District but has contact service from the Villa Grove Fire Department. Chiefs for both fire protection services have been notified of this request, but no comments have been received at this time.
 - (2) The Petitioner testified at the August 11, 2011, public hearing that he had spoken with the Fire Protection District Chief and invited the Fire Protection District to come out to do a training day at the subject property.
- F. Part of the subject property is located within the Special Flood Hazard Area:
- G. Regarding outdoor lighting on the subject property, there is no indication on the site plan of outdoor lighting for any purpose.
- H. Regarding subsurface drainage, the site plan does not contain any information regarding agricultural field tile.

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Item 8.(continued)

- I. Regarding wastewater treatment and disposal on the subject property, the proposed use has no need for any wastewater treatment and disposal.
- J. Regarding the Petitioner's testimony regarding the operations of the proposed RLA:
 - (1) The Petitioner's testimony at the June 16, 2011, public hearing can be summarized as follows:
 - (a) The runway is currently planted in bluegrass and fescue which will be used for his cattle and horses.
 - (b) The grass on the runway will be kept at about 6 to 8 inches.
 - (c) There will be no tillage of the ground but the hay will be baled.
 - (2) The Petitioner's testimony at the August 11, 2011, public hearing can be summarized as follows:
 - (a) He (the Petitioner) does not get the opportunity to fly more than twice per month currently therefore there is not going to be a huge amount of air traffic on the RLA.
 - (b) He would like to allow his father, who is also a licensed pilot, to utilize the airstrip.
 - (c) His (the Petitioner) home is approximately 200 feet east of the location of the finger of land for the proposed hanger.
 - (d) His (the Petitioner) frequency of flying is relative to the weather and time of year because he probably flys more during the month of June and in January.
 - (e) He (the Petitioner) owned several planes but he does not fly all of the planes all of the time because they are investments.
 - (f) Some of the planes he (the Petitioner) owns are registered under the Jones' Flying Association which is registered in Delaware and licensed in Illinois.
- K. Regarding the Petitioner's testimony regarding the CR District adjacent to the subject property and proposed RLA:
 - (1) The Petitioner's testimony at the August 11, 2011, public hearing can be summarized as follows:
 - (a) The trees in the adjacent CR District were measured and the highest tree is 50 feet above the ground at that elevation and the elevation at that location is eight feet below the runway.
 - (b) There is a lot of room for the trees to continue to grow but to his best guess the trees are fully mature and are probably at their maximum height.

- (c) If the trees grew to 66 feet tall they might be a problem.
- (d) The trees will not be damaged, touched, or violated in any way during the use of the proposed RLA.
- L. Regarding basic safety and land use compatibility concerns related to any RLA:
 - (1) Footnote 11 to Section 5.3 of the Ordinance requires that no BUILDING or STRUCTURE be erected or vegetation be maintained that would create an obstruction in an approach slope or transition slope for an existing AIRPORT, RESIDENTIAL AIRPORT, HELIPORT, RESTRICTED LANDING AREA or HELIPORT-RESTRICTED LANDING AREA permitted under the terms of this ordinance unless a SPECIAL USE permit is granted per Section 9.1.5 D.4.
- M. Letters of support have been received from the following:
 - (1) Dan Walsh, Champaign County Sheriff.
 - (2) Bill Keller, former Champaign County Emergency Management Director.
 - (3) Charlie McGrew, Douglas County Sheriff.
 - (4) Ben Shadwick, 1004 North Fox Run, Villa Grove.
 - (5) Charles and Shelley Sollers; 507 South Harrison Street, Philo.
 - (6) Carl Brown, 1577 CR 200N, Tolono.
 - (7) Jud Nogle, 303 Jay Street, Savoy.
- N. Letters of opposition have been received from the following:
 - (1) Larry Hall, 177 N CR 1600E, Villa Grove.
 - (2) Julia Wright Hall, 177 N CR 1600E, Villa Grove.
 - (3) Jean Fisher, 195 N CR 1600E, Villa Grove.
 - (4) Stephen R. Gast, 1580 CR 200N, Tolono.
- O. At the August 11, 2011, public hearing adjacent landowner Larry Hall submitted a petition signed by those in opposition of the proposed rezoning in related Case 687-AM-11. He said the petition reads as follows: We, the undersigned oppose the rezoning in order to protect the existing neighborhoods in the area, preserve the property values of the homes in the existing residential neighborhoods, protect the wildlife, farm, and domestic animals in the area, preserve the scenic value as stated in the Zoning Code as one of the purposes of the Conservation-Recreation classification, protect the safety and welfare of those traveling along Route 130 and protect the safety and welfare of the homeowners in the existing neighborhoods. The following people signed the petition:
 - (1) Larry & Julia Hall, 177 N CR 1600E, Villa Grove.
 - (2) Danielle N. Risken, 187 CR 1600E, Villa Grove.
 - (3) Damon Hood, 187 CR 1600E, Villa Grove.
 - (4) Bill Yeakel, 1602 CR 700N, Villa Grove.
 - (5) Mark & Jean Fisher 195 CR 1600E, Villa Grove.

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Item 8.O.(continued)

- (6) Josh Fisher, 195 CR 1600E, Villa Grove.
- (7) Carol Zell, 1574 CR 100N, Villa Grove.
- (8) Karen L. Scott, 405 North Pine Street, Villa Grove.
- (9) Stephen & Letha Gast, 1580 CR 200 N, Tolono.
- (10) Martha A. Gast, 1562 CR 200N, Tolono.
- (11) Rhys G. Baker, 1562 CR 200N, Tolono.
- (12) J.D. Crawford, 1548 CR 100N, Villa Grove.
- (13) J.C. Crawford, 1545 CR 200N, Tolono (A letter of withdrawal from JC Crawford was received on December 13, 2012).
- (14) Kenneth J. Henry Jr., 16026 CR 200N, Villa Grove.
- (15) Trent Miller, 1601 CR 200N, Villa Grove.
- (16) Shannon Wright, 1006 North Possum Trail, Villa Grove.
- (17) Darren R. Wright, 405 North Pine Street, Villa Grove.
- (18) Walt Ezell, 1574 CR 100N, Villa Grove.
- (19) Hunter Ezell, Villa Grove.
- (20) Phyllis Williams, 1548 CR 100N, Villa Grove.
- (21) Kevin Drum, 1548 CR 100N, Villa Grove.
- (22) Lisa Goin, 1548 CR 100N, Villa Grove.
- (23) Paul & Cindy Garrett, 1602 CR 200N, Villa Grove.
- (24) Wes & Donna Miller, 1603 CR 200N, Villa Grove.
- (25) Joshua Cler, 151 CR 1700E, Villa Grove.
- (26) Kerry Cheely, 1576 CR 200N, Villa Grove.
- (27) Denny Brown, 151 CR 1700E, Villa Grove.
- (28) Terry Brown, 151 CR 1700E, Villa Grove.
- (29) La Tonya Fleming, 1601 East Florida, Urbana.
- (30) Tyran Jackson, 1601 East Florida, Urbana.
- (31) Jesse Fisher, 195 CR 1600E, Villa Grove.
- (32) Christine Fisher, RR1 Fowler, Paloma.
- (33) John Liffick, 1573 CR 200N, Tolono.
- P. In a written statement read at the August 11, 2011, public hearing, neighbor Larry Hall (resident of the nearest dwelling) stated as follows:
 - (1) He and his wife Julia Hall oppose the proposed rezoning.
 - (2) If the rezoning is approved he and his wife request the following restrictions be considered for the proposed RLA and/or Heliport-RLA:
 - (a) If the Heliport-RLA is approved deny the airstrip (RLA) for fixed wing aircraft.
 - (b) Limit the use of the Heliport-RLA to only two helicopters.
 - (c) If the RLA is approved he and his wife request the following restrictions be considered for the proposed RLA:
 - i. The RLA can only be used for personal aircraft and aircraft owned by immediate family.

- *ii.* All identifying numbers of authorized aircraft shall be on file with the Department of Planning and Zoning.
- iii. The landing strip shall not be paved.
- iv. The RLA should not be used for commercial purposes but if used for crop dusting no take off or landings earlier than 7:30AM or later than 5PM and only on Monday through Friday and not on any holiday that falls on a Monday through Friday; and any commercial aircraft shall a minimum liability insurance requirement of \$5 million; and no more than two aircraft shall use the RLA at the same time.
- (3) No inoperative aircraft or parts stored or maintained except inside a full enclosed building.
- (4) The Special Use Permit not be transferable to any future owner of the property.
- (5) The Board should require the Petitioner to have minimum liability insurance of \$5 million and a current certificate of insurance be on file at the Department of Planning and Zoning at all times.
- Q. Regarding possible effects on property values:
 - (1) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and that rezoning would reduce the property values for homes in the area. Ms. Hall also submitted a letter from Daniel M. Cothern, Director of Commercial Real Estate for Keller Williams Realty, that can be summarized as follows:
 - (a) Mr. Cothern visited the home of Larry and Julia Hall to look over the proposed RLA site.
 - (b) Based on his observation and 12 years of professional experience in real estate it is his opinion that an RLA constructed on the proposed property would have a significant negative impact on the Hall's property value and the Hall's have already experienced some reduction in value due to the berms that have been constructed.
 - (c) He hoped there would be concern for the welfare of nearby residents due to safety concerns at all RLA sites.
 - (2) At the August 15, 2011, public hearing, the Petitioner submitted a letter from Jackie Harbin of the Hillard Agency, Inc. Insurance & Real Estate Brokers of Villa Grove, Illinois, that stated the following:
 - (a) She has been in real estate for 19 years.
 - (b) In her opinion a [sic] airplane runway should not affect property values of neighboring property.

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Item 8.Q.(2)(continued)

- (c) The improvements made to the Jones' property should increase neighboring properties value.
- (3) A letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser at Craggs Appraisal Services, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law enforcement property values may increase because of the greater community safety.
- R. At the December 13, 2012, public hearing Mr. Larry Hall, adjacent landowner, testified. Mr. Larry Hall's testimony is summarized as follows:
 - (1) He prepared a large drawing for the Board to review during his testimony and submitted the drawing as a Document of Record.
 - (2) Based on his research and discussions with other pilots crosswinds could pose a risk to aircraft landing at the proposed RLA and would subsequently increase the risk that his family and property would incur, and he is concerned about the effect that any large crosswind from the south might have on an aircraft landing near his home.
 - (3) Based on his research and an article from *Sport Aviation Magazine* that he submitted as a Document of Record, an aircraft landing on a grass runway should not land if the grass is kept at more than 30% of the wheel height and 30% of the wheel height of the petitioners Cessna aircraft is 5.1 inches. If the grass will be kept at 6 to 8 inches this will exceed 30% of the wheel height. If the petitioner intends to operate in a safe manner and maintain the grass runway at 5 inches the hay cannot be harvested which in turn would be taking this land out of agricultural production.
 - (4) The trees in the 30,750 square feet area for the proposed hangar would have to be removed and the removal of these trees would destroy a substantial habitat and conservation environment.
 - (5) Approximately 500 trees were planted on top of the berm that was constructed behind the existing adjacent homes.
- S. (Note: This item needs to be coordinated with evidence regarding Policy 4.3 in related Case 687-AM-11 (item 14.C.) Regarding concerns about safety, noise, preserving the essential character of the District, and land use compatibility due to the proximity of the nearest adjacent dwelling under separate ownership and the proposed RLA, the subject site {IS / IS NOT} suitable for the proposed RLA based on the following:
 - (1) The Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 indicates that the proposed landing strip area is 85 120.65 feet south of the north property line which means that the eastern Runway Safety Area is 75 110.65 feet south of the north property line. The house at 177 CR1600E, Villa Grove, is located on

the property adjacent to the north property line and that house is approximately 32 feet from the north property line of the subject property based on the side yard dimension as stated on the most recent Zoning Use Permit site plan for that property. Thus, the proposed RLA Runway Safety Area is approximately 107 142.65 feet south of the existing house at 177 CR1600E, Villa Grove. See Attachment B Proximity to Nearest Dwelling, included with the Supplemental Memorandum dated 12/13/12.

- (2) The Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 indicates that the proposed hangar is proposed to be located approximately 90 feet north of the existing north property line which makes the proposed RLA runway is 175 feet south of the proposed hangar. Thus, the petitioner's proposed hangar is proposed to be 68 feet further from the proposed RLA runway than is the nearest dwelling under different ownership. See Plan And Profile Of Landing Area Annotated To Illustrate Proposed Separations included as an Attachment to the Supplemental Memorandum dated 3/8/13.
- (3) The Runway Safety Area is generally considered a more dangerous area than land located on either side of the runway.
- (4) IDOT requires taxiways for RLAs to be at least 85 feet from an RLA runway and requires aircraft to be parked at least 85 feet from an RLA runway. See the attachment to the Supplemental Memorandum dated 3/8/13. The nearest adjacent dwelling under other ownership (the house at 177 CR1600E, Villa Grove) is located only 22 feet further away from the RLA runway.
- Staff reviewed a limited number of other Illinois county zoning ordinances to find if any (5) contained "minimum separation requirements from adjacent dwellings". The only minimum separation found in an ordinance was in the Kane County, Illinois Zoning Ordinance which includes both a "Private Landing Strip" and a "Restricted Landing Field". "Private Landing Strip" is a Special Use in the Farming Zoning District (F District) subject to certain restrictions such as compliance with the Illinois Department of Transportation-Division of Aeronautics requirements, limits the number of planes to 2. requires that it must be used in connection with a permitted use in the district. Additional requirements include various minimum separation distances from adjacent facilities and properties including a minimum separation of 200 feet from an adjacent residence or property line and any run up area (undefined) or blast area (undefined). Excepts from the Kane County, Illinois Zoning Ordinance were included in Attachment C to the Supplemental Memorandum dated 12/13/12. Even if the Kane County Ordinance were applicable in this instance it is not clear whether that Ordinance would require a 200 feet separation to the adjacent dwelling because the Kane County Ordinance does not define either "run up area" or "blast area".

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Item 8.S(continued)

- (6) On December 13, 2012, the petitioner's attorney, Alan Singleton, submitted a list of 16 RLA's in and around Champaign County as evidence that "...all of them operating with no apparent problem for the neighborhoods and their residents." Regarding that list of RLA's in and around Champaign County and their proximities to dwellings under different ownership:
 - Eight of the RLA's were indicated as not being located in Champaign County and six of those are located in counties that have not even adopted a zoning ordinance. A ninth RLA, the Clapper RLA, was indicated on the list as being located in Champaign County but is in fact located in Piatt County. For these properties located outside of Champaign County there was not enough time for staff to gather all of the information necessary to fully evaluate ownership and relations between adjacent properties
 - (b) Day Aero-Place was originally developed as a "residential airport" and included a runway and was therefore intended to be marketed towards owners who desired a close proximity to a landing area. Five of the 10 homes in the development border the runway and their proximity to the runway varies between 85 feet and 135 feet. See the Attachment to the Supplemental Memorandum dated 3/8/13.
 - (c) Regarding the other six RLAs and their proximity to the nearest dwelling under different ownership:
 - i. The Justus RLA appears to be about 130 feet from the nearest dwelling that is located on a separate tax parcel however the name of the owner of that parcel also has the last name "Justus" and so it not clear exactly what the relationship is between the two landowners.
 - ii. The Litchfield RLA appears to be about 300 feet from the nearest dwelling that is located on a separate tax parcel however the owner of that dwelling has testified in previous Champaign County Zoning Cases regarding his use of the Litchfield RLA and so the relationship is not the same as proposed in this zoning case.
 - iii. The remaining four RLAs all appear to be at least ¼ mile from the nearest dwelling under different ownership.
- (7) Based on the evidence, the proposed RLA runway safety area is only 107 142.65 feet from the nearest dwelling under different ownership (the house at 177 CR1600E, Villa Grove) which is only 61% 77% of the proposed separation to the proposed hangar and only about 8% 11% of the typical separation for other Champaign County RLAs that were reviewed.

- (8) The petitioner has submitted two opinions from real estate professionals that the proposed RLA will not have a negative impact on adjacent property values and Larry and Julia Hall, the immediate neighbors on the north side of the RLA, have submitted one opinion that the proposed RLA would have a negative impact on their property value (see Item 8.Q)
- T. (Note: This item needs to be coordinated with evidence regarding Policy 4.3 in related Case 687-AM-11 (item 14.C.) Regarding concerns due to impacts on the remaining natural and scenic areas in the surrounding CR District, the subject site {IS / IS NOT} suitable for the proposed RLA based on the following:
 - (1) An Attachments to the Supplemental Memoranda dated 3/8/13 and 4/17/13 titled Plan And Profile Of Landing Area Annotated To Illustrate Likely Impacts To CR District Habitat indicates the following three types of impacts to adjacent habitat areas in the surrounding CR District:
 - (a) A portion of the CR District that is currently wooded and is 30,750 26,903 square feet (.706 acre) (.617 acre) in area is proposed to be rezoned to the AG-1 District for the construction and development of the proposed hangar. The existing vegetation in this area will necessarily be removed to allow construction of the proposed hangar and movement of aircraft to and from the hangar.
 - (b) A portion of the CR District that is not currently wooded and is approximately 1.700 acres in area is proposed to remain in the CR District but is located at the west end of the proposed RLA and underneath the "Approach Area" required by IDOT. The slope of the Approach Area is 15 feet horizontal to one foot vertical and nothing is allowed to penetrate the imaginary plane of the Approach Area for a distance of 3,000 feet from the end of the RLA runway. Vegetation below the Approach Area must be maintained at a height such that it does not penetrate the Approach Area. The Approach Area is 47 18 feet above the runway on the east side of this area and approximately 43 46 feet above the runway on the west side. As indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12, the surface of the ground slopes down to the channel of the East Branch of the Embarrass River and the allowed clear height below the approach area will vary from 20 feet to 49 approximately 50 feet. It is unlikely that this area can ever have mature native trees so long as the IDOT Certificate is maintained for the proposed RLA.
 - (c) A portion of the CR District that is currently wooded and is approximately 3.90 acres in area is located west of the proposed RLA and on the west side of the East Branch of the Embarrass River and this area will also be located underneath the IDOT required Approach Area. The ground elevations in this area are not indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13 so the allowable clear height is not known with any accuracy. However, the Approach Area varies in height from 43

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Item 8.T.(1)(c)(continued)

46 feet above the runway on the east side of this wooded area to 67 85 feet in height above the runway on the west side. This land is not currently owned by the petitioner but in order to retain the IDOT Certificate for the proposed RLA the trees below the Approach Area cannot penetrate above the imaginary surface of the Approach Area and therefore trees cannot be taller than the Approach Area.

- (2) Regarding the height of trees that may be growing in the CR District on the west side of the East Branch of the Embarrass River:
 - (a) The 2003 update of the Soil Survey of Champaign County, Illinois indicates that for the relevant portion of the CR District on the west side of the East Branch of the Embarrass River the predominant soils are map units 3107A Sawmill silty clay loam, 0 to 2 percent slope, frequently flooded and 570C2 Martinsville loam 5 to 10% slopes, eroded. Table 11 provides relevant data regarding forestland management and productivity for each soil map unit, and is summarized as follows for the relevant soils:
 - i. Common trees and their site index (average height) found on 570C2 Martinsville soil are White oak (80), Sweetgum (76), and Tulip tree (98).
 - ii. Common trees and their site index (average height) found on 3107A Sawmill soil are Pin oak (90), American sycamore (---), Eastern cottonwood (---), and Sweetgum (---). Note that the site index (average height) for a given species may vary depending on the soil type and the symbol (---) apparently indicates no average height has been determined for that species on that soil type.
 - (b) The petitioner's wife, Sarabeth Jones, testified at the December 13, 2012, public hearing that to her knowledge there are no Sycamore trees on their property but there are White oak trees.
 - (c) If there are White oak trees on the petitioner's property there likely are White oak trees on the land on the west side of the East Branch of the Embarrass River.
 - (d) Excerpts from the *Field Guide to Native Oak Species of Eastern North America* by the USDA Forest Service were included as an Attachment to the Supplemental Memorandum dated 3/8/13 and state that the White oak tree grows to 100 feet tall.
 - (e) An excerpt from the Native Trees of the Midwest that is maintained on the website of the Morton Arboretum located in Lisle, Illinois indicates that a tree in its native habitat may reach much greater height than the same tree growing in a home landscape and the heights of trees indicated in Native Trees of the Midwest reflect the average size in the home landscape. White Oak trees are indicated to have a mature height of 50 feet to 80 feet in Native Trees of the Midwest but that

height reflects the average size in the home landscape and not the native habitat. The Field Guide to Native Oak Species of Eastern North America by the USDA Forest Service (see above) indicates that the White oak tree grows to 100 feet tall in the native habitat. The 2003 update of the Soil Survey of Champaign County, Illinois indicates that the average height of White oak trees found on 570C2 Martinsville soil is 80 feet.

- (f) If there are White Oak trees on the west side of the East Branch of the Embarrass River located beneath the Approach Area of the proposed RLA the White oak trees are likely to be on higher ground elevations than the river bottom and may already penetrate the proposed Approach Area. A special condition has been proposed to prohibit landscape or tree maintenance in the wooded area in the CR District on the west side of the East Branch of the Embarrass pursuant to the RLA.
- U. At the December 13, 2012, public hearing Dr. Phillip Jones, petitioner, testified. Dr. Jones' testimony is summarized as follows:
 - (1) He has planted over 2,500 native hardwood trees on his property therefore to indicate that he is creating a conservation problem is unfounded. Note the Petitioner testified at the March 14, 2013, public hearing that he has planted 1,009 trees on his property.
 - (2) He has been flying over 20 years and has never had an incident of any kind and the argument regarding crosswinds is not an issue.
 - (3) Larry Hall's house is further away than almost all airport hangars to a landing strip and it is impossible to drive an airplane through the five feet of grass that is near Mr. Hall's property.
 - (4) An airplanes engine is on idle when it lands therefore his aircraft will be quieter than his diesel truck is when he drives down his lane. There may be a little noise when he takes off but he will be 1,000 feet in the air when he passes over Larry Hall's house.
 - (5) He has not made any movement in purchasing any additional property. The property adjacent to his is zoned CR and he would have to purchase 60 and an additional 80 acres which would require a substantial amount of money.
 - (6) His helicopter has one 315 horsepower engine the helicopter that generally lands at Carle Hospital has two 650 horsepower engines and comparing the noise it makes to the noise the helicopter that lands at Carle Hospital is like comparing a Nissan car to a semi-truck, and the noise is much less.

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Item 8.(continued)

- V. At the December 13, 2013, public hearing Mrs. Jean Fisher, neighbor, testified. Mrs. Fisher's testimony is summarized as follows:
 - (1) The Morton Arboretum website references native trees of the Midwest and describes the uses of such trees as food, shelter for wildlife and the advantages of trees in the landscape. Many of the common trees such as Sycamore, Oak, Maple, Basswood, Hickory Pines, and River birch grow to heights of 40 to 100 feet and are characterized as either fast or slow growing. Fast growing trees may average 25 inches per year, medium growing trees can average 13 to 22 inches per year, and slow growing trees may average less than 12 inches per year.
 - (2) Trees located along the river basin provide habitat for wildlife, stabilize ground, filter watershed, and improve water and air quality.
 - (3) If area homeowners decide to sell their property, especially Larry Hall, they would have to fully disclose that the property abuts an RLA and in her opinion that hurts property values and the proximity to an RLA could be a deal breaker for potential buyers.
- W. At the December 13, 2012, public hearing Mrs. Sarabeth Jones, petitioner, testified. Mrs. Jones' testimony is summarized as follows:
 - (1) She cannot believe that the cutting of the trees would cause more damage than what they have added to the property because they have enhanced the area by adding prairie and habitat areas for the different wildlife.
 - (2) She rides her horse on the entirety of the property and to her knowledge there are no Sycamore or Red Oak trees although they do have White Oak trees on the property.
- X. At the December 13, 2013, public hearing Linda Schumm, Bureau Chief Aviation Safety IDOT, testified that air traffic control will not tell a pilot to land in an RLA, but will tell the pilot that there is an RLA in the area because it is always safer to land on a runway than on a cornfield or road.
- Y. A letter received December 13, 2012, from J.C. Crawford, nearby landowner, requested that his name be removed from the petition of opposition that was submitted at the August 11, 2011, public hearing.
- Z. Regarding nuisance noise from the proposed RLA, the berm that has been constructed, and the effect on the scenic qualities of the CR District:
 - (1) As indicated on a Survey Exhibit for Dr. Phillip Jones received August 19, 2009, from Koehler Professional Engineers & Land Surveyors (an attachment to the Supplemental Memorandum dated 3/14/13), there is a berm is located on the petitioner's property north of the proposed RLA and along the east property line and bordering the rear property lines of the neighboring residential properties.

- (2) Petitioner's Attorney Alan Singleton testified at the June 16, 2011, public hearing that one of the purposes of the berm was to serve as a noise barrier to the airplane.
- (2) At the June 16, 2011, public hearing Julia Wright-Hall, adjacent landowner, made the following statements in response to the questions asked by the petitioner's attorney Alan Singleton during cross examination:
 - (a) Ms. Wright-Hall stated no, in response to the question, if she was familiar with the construction of a berm for the blockage of noise.
 - (b) Ms. Wright-Hall stated that the location of the RLA is not located where the existing berm is located, in response to the question, if she would be surprised to discover that one of the purposes of the berm was to serve as a noise barrier to the airplane.
- (3) The petitioner Dr. Phillip Jones testified at the August 11, 2011, public hearing in part as follows:
 - (a) He plants native prairie grasses and he assumes that what he has planted is growing.
 - (b) He is not sure what he is going to do yet regarding maintaining the vegetation on the berm.
- (4) At the August 11, 2011, public hearing neighbor Larry Hall testified in part as follows:
 - (a) He is concerned with the safety and noise aspects of the proposed RLA.
 - (b) He and his wife understood there was noise from the highway when they purchased the property.
 - (c) The total proposal includes the berms that have been constructed and the lack of maintenance of the berms.
 - (d) The berm located west of his residence has a grade of 1.2 to 1 and that slope cannot be maintained and the weeds are seven to eight feet tall and why would the Board believe that anything else will be maintained.
- (5) At the June 16, 2011, public hearing neighbor Julia Wright Hall testified in part as follows:
 - (a) She and her husband are concerned with the existing wildlife and vegetation of the area and in her opinion increased air traffic over their property would discourage wildlife from using the area.

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Item 8.Z.(5)(continued)

- (b) Before the eight to nine feet embankment was built by Dr. Jones to the west of their home they were able to observe deer grazing in the field but since the embankment was created they have not been able to see any deer.
- (c) Her and her husband's views of the natural and scenic area have been destroyed by the wall of dirt topped by tall weeds and thistle and the view will be depreciated even further by the sound of planes and helicopters.
- (6) At the June 16, 2011, public hearing neighbor Jean Fisher testified in part that the 10 feet tall dirt berm that has been constructed on the Jones' property is an eyesore and it has forever changed the landscape.
- (7) At the June 16, 2011, public hearing neighbor Mark Fisher testified in part as follows:
 - (a) He and his wife purchased their property over 20 years ago to enjoy the scenic view to the west and south that is zoned CR Conservation Recreation.
 - (b) He is searching for a valid reason to allow a piece of our historic natural resource to become an airstrip.
 - (c) He wonders why Dr. Jones does not locate the RLA on his other farmland rather than chipping away at our valued conservation property.
- AA. At the March 14, 2013, public hearing the Petitioner submitted a letter from arborist Greg Durst.

 Petitioner's Attorney Alan Singleton testified that Greg Durst had not been on the land that is located on the west side of the river and that the determination was made from the Jones' land.
- BB. There is no evidence indicating that the Special Use will not be compatible with adjacent agriculture.
- CC. Other than as reviewed elsewhere in this Summary of Evidence, there is no evidence to suggest that the proposed Special Use will generate either nuisance conditions such as noise, vibration, glare, heat, dust, electromagnetic fields or public safety hazards such as fire, explosion, or toxic materials release, that are in excess of those lawfully permitted and customarily associated with other uses permitted in the zoning district.

GENERALLY REGARDING WHETHER THE SPECIAL USE CONFORMS TO APPLICABLE REGULATIONS AND STANDARDS AND PRESERVES THE ESSENTIAL CHARACTER OF THE DISTRICT

9. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use conform to all applicable regulations and standards and preserve the essential character of the District in which it shall be located, except where such regulations and standards are modified by Section 6 of the Ordinance:

- A. The Petitioner has testified on the application, "As the RLA and the Heliport-RLA will be used to a significant degree for agricultural purposes, the special use will comply with the agricultural nature of the surroundings in addition to serving and complimenting agriculture on the parcel itself, neighboring and other lots owned by the applicant."
- B. Regarding compliance with the *Zoning Ordinance*:
 - (1) The proposed RLA complies with all area and placement requirements for the AG-1 District in Section 5.3.
 - (2) Regarding parking on the subject property, it is unclear what the exact parking requirements for an RLA would be, however, there appears to be more than adequate area around the farmstead to accommodate parking for the proposed use.
 - (3) Regarding compliance with the standard condition requiring a proposed RLA must meet the requirements of the Federal Aviation Administration (FAA) and Illinois Department of Transportation, Division of Aeronautics (IDOT/DOA):
 - (a) The FAA requirements for RLA's mostly deal with operation of the RLA once it is established. However, the FAA does make an airspace determination before the RLA is established. This airspace determination must be favorable for the RLA to be established, the IDOT/DOA requirements incorporate this requirement.
 - (b) IDOT/DOA enforces the *Illinois Aviation Safety Rules* (92 *Ill. Admin. Code* Part 14) which contains regulations for establishment of a RLA.
 - (c) RLA's are required to be private use only, to provide a sufficient landing area taking into account the skill of the pilots using the facility and the type of aircraft used, and to meet minimum dimensional standards.
 - (d) RLA's are required to obtain a Certificate of Approval from IDOT/DOA, which involves an application process with an initial inspection of the proposed area, obtaining an FAA airspace determination, publication of notice in a local newspaper, the chance for concerned neighbors to request a hearing, and a final inspection.
 - (e) RLA's are also required to meet minimum runway dimensions and to have imaginary surfaces of specified slope on all four sides of the runway that are free from obstruction by any structures or natural obstructions, as follows:
 - i. An RLA runway is required to be a minimum of 100 feet wide and to have a minimum length of 1600 feet. It is possible that due to certain obstructions a runway may be longer than 1600 feet but only for landings or take offs in certain directions.

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Item 9.B.(3)(continued)

- ii. There are also requirements for separation distances between a runway, taxiway, and aircraft parking, but the petitioner has not indicated any a taxiway on the site plan.
- iii. At either end of the runway a 15:1 slope extending 3,000 feet beyond the end of the runway.
- iv. On either side of the runway a 4:1 slope extending 135 feet from the centerline of the runway.

There does not appear to be any obstruction that would interfere with the side transition slopes.

- (f) Overall it appears that if the petitioners obtain a positive airspace determination from the FAA they will meet all state and federal requirements for establishing an RLA. There are also numerous requirements for safe operation of an RLA, which the petitioners are also required to meet or be in violation of their SUP.
- (4) The RESTRICTED LANDING AREA shall provide for a runway plus a runway safety area both located entirely on the LOT. The runway safety area is an area centered 120 feet wide and extending 240 feet beyond each end of the runway.

The site plan received November 19, 2012, indicates Runway Safety Areas on the east and west side of the runway with dimensions of 120' × 250'.

- (5) No part of a BUILDING or STRUCTURE intended for regular human occupancy located within a R or B District nor any PUBLIC ASSEMBLY or INSTITUTIONAL USE may be located:
 - (a) Within the Primary Surface, an area 250 feet wide centered on the runway centerline and extending 200 feet beyond each end of the runway; or
 - (b) The Runway Clear Zones, trapezoidal areas centered on the extended runway centerline at each end of the Primary Surface, 250 feet wide at the end of the primary surface and 450 feet wide at a point 1,000 feet from the primary surface.
 - (c) These areas are not indicated on the site plan, but they are not required to be entirely contained on the subject property and there are no structures within the described areas.
 - (d) No Runway Clear Zone will exist at the south end of the runway on the other side of CR 0N because that is Douglas County, which does not have zoning.

(6) After a RESTRICTED LANDING AREA is established, the requirements in Section 4.3.8 and Table 5.3 note (11) shall apply.

This condition does not appear to be a requirement on the petitioners, but instead on anyone who is building a structure of some sort close enough to the RLA that it might be a hazard to aircraft.

- C. Regarding compliance with the *Stormwater Management Policy*, the proposed use will not require any stormwater detention.
- D. Regarding the Special Flood Hazard Areas Ordinance and Subdivision Regulations:
 - (1) All of the subject property is located in the Special Flood Hazard Area but topographical elevations have been submitted that indicate that most of the subject property is above the Base Flood Elevation.
 - (2) The subject property complies with the Subdivision Regulations.
- E. Regarding the requirement that the Special Use preserve the essential character of the AG-1 Zoning District:
 - (1) Restricted Landing Area is permitted by Special Use Permit in the AG-1 Agriculture Zoning District.
 - (2) The proposed use *WILL NOT* hinder agricultural production on adjacent properties and agricultural production may still occur onsite. (from related Case 687-AM-11)
 - (3) The visual character of the subject property will not be changed much because agricultural production will still occur onsite in the same general area that has been under production.
 - (4) There will be no increase in automobile or truck traffic
 - (5) There will be no significant drainage impacts because the proposed special use will comply with the Stormwater Management Policy.
 - (6) There will be no impact on public health.
 - (7) See the discussion under item 8.S. regarding any impact on public safety, nuisance effects and property values due to the proximity to a dwelling under other ownership and Item 8.T. regarding the impacts on the CR District.
- F. Currently, the subject property is zoned CR Conservation Recreation and the land to the north, west, and south will remain in the CR District. Regarding the whether or not the proposed special use will preserve the essential character of the surrounding CR District:

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Item 9.F.(continued)

- (1) As reviewed in related Case 687-AM-11 the types of uses authorized by right in the AG-1 District are nearly identical to the by-right uses in the CR District and any proposed Special Use on this property should be evaluated for compatibility with the adjacent CR uses.
 - (2) Compatibility of the proposed special use with surrounding agriculture was evaluated in related case 687-AM-11 under review of Land Resource Management Plan Objective 4.2 regarding interference with agricultural operations and the Zoning Board of Appeals found the proposed special use *WILL NOT* interfere with agricultural operations.
 - (3) The proposed special use will have no significant impact on traffic, drainage, public health, or visual character of the surrounding CR District.
 - (4) See the discussion under item 8.S. regarding any impact on public safety and nuisance effects due to the proximity to a dwelling under other ownership. and Item 8.T. regarding the impacts on the CR District.
 - (5) The visual character of the subject property will not be changed much because agricultural production will still occur onsite in the same general area that has been under production.
 - (6) There will be no increase in automobile or truck traffic
 - (7) There will be no significant drainage impacts because the proposed special use will comply with the Stormwater Management Policy.
 - (8) There will be no impact on public health.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE

- 10. Regarding the *Zoning Ordinance* requirement that the proposed Special Use is in harmony with the general intent and purpose of the Ordinance:
 - A. A "RESTRICTED LANDING AREA" may be authorized in the AG-1 Agriculture Zoning District as a Special Use provided all other zoning requirements are met.
 - B. Regarding whether the proposed Special Use Permit is in harmony with the general intent of the Zoning Ordinance:
 - (1) Subsection 5.1.7 of the Ordinance states the general intent of the AG-1 District and states as follows (capitalized words are defined in the Ordinance):
 - The AG-1, Agriculture DISTRICT is intended to protect the areas of the COUNTY where soil and topographic conditions are best adapted to the pursuit of AGRICULTURAL USES and to prevent the admixture of urban and rural USES which would contribute to the premature termination of AGRICULTURAL pursuits.

- (2) The types of uses authorized in the AG-1 District are in fact the types of uses that have been determined to be acceptable in the AG-1 District. Uses authorized by Special Use Permit are acceptable uses in the district provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.
- C. Regarding whether the proposed Special Use Permit is in harmony with the general purpose of the Zoning Ordinance:
 - (1) Paragraph 2 .0 (a) of the Ordinance states that one purpose of the Ordinance is securing adequate light, pure air, and safety from fire and other dangers.

In related Case 687-AM-11 the ZBA determined that the proposed zoning map amendment {DOES/DOES NOT} secure adequate light, pure air, and safety from fire and other dangers for the following reasons:

- (a) This purpose is directly related to the limits on building coverage and the minimum yard requirements in the Ordinance and the proposed site plan is in full compliance with those requirements.
- (b) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and:
 - i. Rezoning the property to allow for an RLA would prevent her from securing safety due to the possibility of an aircraft accident.
 - ii. She submitted accident information from the National Transportation Safety Board (NTSB) indicating there were 34 recorded single engine plane crashes in Illinois from 1/5/10 to 7/7/11.
 - iii. She submitted information from a 2009 publication of the *Helicopter Association International* indicating there were 161 civil helicopter accidents in 2009.
 - iv. The pond constructed by the Jones' attracts waterfowl which creates a distinct hazard to aircraft landing or taking off and according to data from the FAA there were 486 bird strikes by planes in Illinois in 2010.
- (2) Paragraph 2.0 (b) of the Ordinance states that one purpose of the Ordinance is conserving the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY.

In related Case 687-AM-11 the ZBA determined that the proposed zoning map amendment {DOES/DOES NOT} conserve the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY for the following reasons:

(a) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and the rezoning would reduce the property values for homes in the area. Ms. Hall also submitted a letter from Daniel M. Cothern,

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Item 10.C.(2)(continued)

Director of Commercial Real Estate for Keller Williams Realty, that stated in general that the RLA would have a negative impact on property value and is summarized above under item 8.Q.

- (b) At the August 15, 2011, public hearing, the Petitioner submitted a letter from Jackie Harbin of the Hillard Agency, Inc. Insurance & Real Estate Brokers of Villa Grove, Illinois, that stated in general that the runway should not effect property values of neighboring property and is summarized above under item 8.P.
- (c) A letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser at Craggs Appraisal Services, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law enforcement property values may increase because of the greater community safety.
- (d) The RLA is proposed to be 142.65 feet from the nearest dwelling.
- (e) The property is currently zoned CR and an RLA is not an authorized use in the CR District.
- (f) Refer to Item 8.Z. of the Summary of Evidence and Finding of Fact for related Case 688-S-11 for testimony regarding the existing berm, noise, and scenic quality.
- (3) Paragraph 2.0 (c) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding congestion in the public STREETS.
 - In related Case 687-AM-11 the ZBA determined that the proposed zoning map amendment is not directly related to this purpose.
- (4) Paragraph 2.0 (d) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding the hazards to persons and damage to PROPERTY resulting from the accumulation of runoff from storm or flood waters.
 - In related Case 687-AM-11 the ZBA determined that the proposed zoning map amendment and the requested Special Use Permit complies with the *Champaign County Stormwater Management Policy* and there are no special drainage problems that appear to be created by the Special Use Permit.
- (5) Paragraph 2.0 (e) of the Ordinance states that one purpose of the Ordinance is promoting the public health, safety, comfort, morals, and general welfare.
 - (a) In regards to public safety, this purpose is similar to the purpose established in paragraph 2.0 (a) and is in harmony to the same degree.

- (b) In regards to public comfort and general welfare, this purpose is similar to the purpose of conserving property values established in paragraph 2.0 (b) and is in harmony to the same degree.
- (c) In related Case 687-AM-11 the ZBA determined that because of the proposed Special Use in related Case 688-S-11, the proposed zoning map amendment {DOES/DOES NOT} promote the public health, safety, comfort, morals, and general welfare.
- (6) Paragraph 2.0 (f) states that one purpose of the Ordinance is regulating and limiting the height and bulk of BUILDINGS and STRUCTURES hereafter to be erected; and paragraph 2.0 (g) states that one purpose is establishing, regulating, and limiting the BUILDING or SETBACK lines on or along any STREET, trafficway, drive or parkway; and paragraph 2.0 (h) states that one purpose is regulating and limiting the intensity of the USE of LOT AREAS, and regulating and determining the area of OPEN SPACES within and surrounding BUILDINGS and STRUCTURES.

These three purposes are directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in full compliance.

Paragraph 2.0 (i) of the Ordinance states that one purpose of the Ordinance is classifying, regulating, and restricting the location of trades and industries and the location of BUILDINGS, STRUCTURES, and land designed for specified industrial, residential, and other land USES; and paragraph 2.0 (j.) states that one purpose is dividing the entire COUNTY into DISTRICTS of such number, shape, area, and such different classes according to the USE of land, BUILDINGS, and STRUCTURES, intensity of the USE of LOT AREA, area of OPEN SPACES, and other classification as may be deemed best suited to carry out the purpose of the ordinance; and paragraph 2.0 (k) states that one purpose is fixing regulations and standards to which BUILDINGS, STRUCTURES, or USES therein shall conform; and paragraph 2.0 (l) states that one purpose is prohibiting USES, BUILDINGS, OR STRUCTURES incompatible with the character of such DISTRICT.

Harmony with these four purposes requires that the special conditions of approval sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate nonconforming conditions. Special conditions have been proposed (see Item 13).

(8) Paragraph 2.0 (m) of the Ordinance states that one purpose of the Ordinance is preventing additions to and alteration or remodeling of existing BUILDINGS, STRUCTURES, or USES in such a way as to avoid the restrictions and limitations lawfully imposed under this ordinance.

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Item 10.C.(8) (continued)

The proposed Special Use Permit is not directly related to this purpose.

(9) Paragraph 2.0 (n) of the Ordinance states that one purpose of the Ordinance is protecting the most productive AGRICULTURAL lands from haphazard and unplanned intrusions of urban USES.

The types of uses authorized in the AG-1 and CR Districts are in fact the types of uses that have been determined to be acceptable in those AG-1 Districts. Uses authorized by Special Use Permit are acceptable uses in the district provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.

(10) Paragraph 2.0 (o) of the Ordinance states that one purpose of the Ordinance is protecting natural features such as forested areas and watercourses.

In related Case 687-AM-11 the ZBA determined that Because of the proposed Special Use, the proposed zoning map amendment is directly related to this purpose because of the following: {DOES/DOES NOT} protect natural features such as forested areas and watercourses for the following reasons:

- (a) A report received April 29, 2011, from the Champaign County Soil and Water Conservation District reports that if preventative measures are taken for erosion and sedimentation there should be no issue with water quality.
- (b) The proposed hangar, if constructed would require some of the wooded area on the subject property to be cut down.
- (c) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and the rezoning would not protect the forested area.
- (d) The Petitioner testified at the August 11, 2011, public hearing that the trees will not be damaged, touched, or violated in any way during the use of the proposed RLA.
- (e) The Petitioner testified at the December 13, 2012, public hearing that he has planted over 2,500 native hardwood trees on his property.
- (f) At the December 13, 2012, public hearing, neighbor Larry Hall stated that the 30,750 square feet area for the proposed hangar would have to be removed and the removal of these trees would destroy a substantial habitat and conservation environment.

- (g) At the December 13, 2012, public hearing, nearby landowner Jean Fisher, testified that trees along the river basin provide habitat for wildlife, stabilize ground, filter watershed, and improve water and air quality.
- (h) At the December 13, 2012, public hearing Mrs. Sarabeth Jones, petitioner, testified that she cannot believe that the cutting of the trees would cause more damage than what they have added to the property because they have enhanced the area by adding prairie and habitat areas for the different wildlife.
- (11) Paragraph 2.0 (p) of the Ordinance states that one purpose of the Ordinance is encouraging the compact development of urban areas to minimize the cost of development of public utilities and public transportation facilities.
 - This purpose is not relevant to the proposed Special Use Permit because the AG-1 District is not for urban development.
- (12) Paragraph 2.0 (q) of the Ordinance states that one purpose of the Ordinance is encouraging the preservation of AGRICULTURAL belts surrounding urban areas, to retain the AGRICULTURAL nature of the COUNTY, and the individual character of existing communities.
 - The types of uses authorized in the AG-1 District are in fact the types of uses that have been determined to be acceptable in the AG-1 District. Uses authorized by Special Use Permit are acceptable uses in the district provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.
- (13). Paragraph 2.0 (r) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to provide for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

This purpose is not relevant to the proposed Special Use Permit because the AG-1 District is not for urban development.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS AN EXISTING NONCONFORMING USE

- 11. The proposed Special Use is not an existing NONCONFORMING USE.
 - A. The Petitioner has testified on the application, "Not applicable"

GENERALLY REGARDING ANY SPECIAL CONDITIONS OF APPROVAL

- 12. The following special conditions of approval were proposed by the petitioner on December 13, 2012, but were not included as required special conditions:
 - A. There will be no tight northbound departures below 1000 feet.

The above condition was not included as a requirement for the RLA because this condition cannot be enforced by the Zoning Administrator. Nonetheless, the petitioner is encouraged to follow such a rule on an honor basis so as to help ensure good neighborly relations.

B. There will be an increased traffic pattern altitude of 1500 feet above ground level as opposed to the standard 1000 feet above ground level

The above condition was not included as a requirement for the RLA because this condition cannot be enforced by the Zoning Administrator. Nonetheless, the petitioner is encouraged to follow such a rule on an honor basis so as to help ensure good neighborly relations.

- 13. Regarding proposed special conditions of approval:
 - A. The proposed RLA must receive a Certificate of Approval for operation from the Illinois Department of Transportation Division of Aeronautics (IDOT). Likewise, IDOT requires the RLA to have any necessary county zoning approvals. The following condition will ensure that the proposed RLA must be in conformance with IDOT in order to remain in conformance with the Champaign County Zoning Ordinance:

The Restricted Landing Area must be used in compliance with the approved Certificate of Approval for operation from the Illinois Department of Transportation Division of Aeronautics.

The above condition is necessary to ensure that:

The proposed RLA is operated so as to ensure public safety.

B. The petitioner shall apply for a Change of Use Permit within 30 days of the approval of the special use permit or the proposed rezoning in related zoning case 687-AM-11, whichever occurs last.

The above condition is necessary to ensure the following:

Compliance with the Zoning Ordinance within a reasonable time frame.

C. The use of the RLA by fixed wing aircraft for non-public safety assistance shall be no more than three take offs and three landings in any 28 day period whether that use is by the petitioner or an invited guest.

The above condition is necessary to ensure the following:

That the use of the RLA does not become excessive in such close proximity to a dwelling under other ownership.

D. The use of the RLA for personal helicopter use shall be limited to no more than two take offs and two landings in any 28 day period whether that use is by the petitioner or an invited guest.

The above condition is necessary to ensure the following:

That the use of the helicopter(s) for personal use does not exceed the amount of use authorized for fixed wing aircraft given that no Heliport-RLA has been requested.

E. No "Fly-In Event" (more than 6 planes) as described in 92 Ill. Adm. Code 14.760 shall occur on the subject property.

The above condition is necessary to ensure the following:

That the use of the RLA does not become excessive in such close proximity to a dwelling under other ownership.

F. The petitioner shall maintain at all times when take-offs and/ or landings may occur at the RLA, public liability and property damage insurance with a minimum coverage of \$5 million dollars and a copy of a valid certificate of insurance shall be on file with the Zoning Administrator when any take-offs or landings do occur.

The above condition is necessary to ensure the following:

That the petitioner has adequate insurance to compensate anyone affected by injury or property damage resulting from the operation of the RLA in such close proximity to a dwelling under other ownership.

G. No pre-operation run up procedures shall be conducted east of the proposed hangar location.

The above condition is necessary to ensure the following:

To prevent nuisance conditions resulting from the RLA.

H. All landing traffic patterns shall be flown exclusively south of the RLA to maximize the distance between the aircraft landing at the RLA and the neighboring residential properties to the north.

The above condition is necessary to ensure the following:

To minimize nuisance conditions resulting from the RLA.

I. The Special Use Permit shall not be transferrable to future owners of the subject property.

The above condition is necessary to ensure the following:

That any future owner(s) of the subject property must also receive the proper approvals for an RLA.

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Item 13. (continued)

J. All aircraft (operable and inoperable) and aircraft parts must be stored in a fully enclosed building/hangar at all times.

The above condition is necessary to ensure the following:

That nuisance problems do not arise as a result of the establishment of the RLA.

K. The only aircraft that may be stored at the RLA and on the owner's adjacent property shall be limited to the owner's aircraft and aircraft owned by the parents, children, or siblings of the owner which in no case shall exceed eight aircraft at any given time.

The above condition is necessary to ensure the following:

That the proposed RLA only be used for aircraft of the owner and the immediate family.

L. This RLA Special Use Permit does not authorize landscape or tree maintenance in the wooded area in the CR District on the west side of the East Branch of the Embarrass River and any tree trimming or removal of trees in that area pursuant to the RLA shall cause this Special Use Permit to become void.

The special condition above is necessary to ensure the following:

To ensure that the environmental quality of the wooded area is not damaged for the purpose of protecting the RLA certification by IDOT.

M. No take-offs or landings shall occur at anytime other than during daylight hours except as required for public safety assistance which may occur anytime necessary.

The above condition is necessary to ensure the following:

That the use of RLA does not occur at nighttime unless required for public safety assistance.

M.N.‡ There shall be a minimum separation distance of at least 230 feet between the nearest point of the RLA and the nearest dwelling.

The above condition is necessary to ensure the following:

That the use of the RLA does not pose unusual safety or nuisance concerns due to even closer proximity to a dwelling under other ownership.

‡Note that this requirement is probably not suitable as a "special condition" and has been included here simply so that it will not be overlooked. If the Board is inclined to require a greater separation it should require a different site plan and a different legal description that describes a location that provides the greater separation.

- N. O. Generally regarding the above Special Condition:
 - (1) At the December 13, 2012, public hearing Alan Singleton, Attorney for the petitioner testified that adding additional safety precautions such as an additional setback that is not contained within IDOT standards is not permissible by Illinois law, and he provided copies of the previous legal cases under Tabs 4, 5, and 6 of his handout packet.
 - (2) At the March 14, 2013, public hearing Zoning Administrator John Hall reported to the ZBA that the results of the legal review by the State's Attorney is that in general, the County can make a site specific determination regarding the adequacy of proposed separation between the proposed RLA and specific adjacent properties so long as there are specific and compelling considerations related to that location.

DOCUMENTS OF RECORD

- 1. Special Use Permit Application signed by Philip W. and Sarabeth F. Jones received on April 29, 2011, with attachments:
 - A List of property owners adjacent to or within 250 feet
 - B United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
 - C Sketch of land parcels adjacent or within 250 feet
 - D Land Parcel Description prepared by F. Wayne Ward
 - E Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - F Proposed RLA site plan, 8½ x 11 inches (not to scale)
 - G Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - H Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011
 - I Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
 - J Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23,2010
 - K Color copies of Phillip Jones Airstrip Soils Map by the Champaign County Soil and Water Conservation District received April 29, 2011
 - Color copies of United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
- 2. Petition for Zoning Map Amendment signed by Philip W. and Sarabeth F. Jones received on April 29, 2011, with attachments:
 - A List of property owners adjacent to or within 250 feet
 - B United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
 - C Sketch of land parcels adjacent or within 250 feet
 - D Land Parcel Description prepared by F. Wayne Ward
 - E Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - F Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109213 dated March 1, 2011
 - G Illinois Department of Natural Resources Eco CAT Natural Resource Review Results for Project Number 1109346 dated 3/02/2011
 - H Plat "B" Prepared for Ed Gire Ground Elevation Survey Proposed Building Site prepared by F. Wayne Ward dated January 14, 2004
 - I Topographic Survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010
 - J Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - K Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109346 dated March 3, 2011

- Cover Letter to Illinois Historic Preservation Evaluation prepared by Alan R. Singleton Law Firm received April 29, 2011
- M Letter from Anne E. Haaker Deputy State Historic Preservation Officer dated April 2, 2011
- N Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011
- O Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
- P Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23, 2010
- 3. Preliminary Memorandum for Case 687-AM-11 dated June 10, 2011, with attachments:
 - A Case Maps for Cases 687-AM-11 & 688-S-11 (Location, Land Use, Zoning)
 - B Land Parcel Description prepared by F. Wayne Ward
 - C Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109346 dated March 3, 2011
 - D Illinois Department of Natural Resources Eco CAT Natural Resource Review Results for Project Number 1109346 dated 3/02/2011
 - E Cover Letter to Illinois Historic Preservation Evaluation prepared by Alan R. Singleton Law Firm received April 29, 2011
 - F Letter from Anne E. Haaker Deputy State Historic Preservation Officer dated April 2, 2011
 - G Preliminary Finding of Fact for Case 687-AM-11
- 4. Preliminary Memorandum for related Case 688-S-11 dated June 10, 2011, with attachments:
 - A Zoning Case Maps for Cases 687-AM-11 & 688-S-11 (Location, Land Use, Zoning)
 - B Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - C Excerpt of Flood Insurance Rate Map (FIRM) Community Panel Number 170894 0275 B dated March 1, 1984
 - D Excerpt of Embarras River Watershed Digital Floodplain Mapping, Champaign County, Illinois. Illinois State Water Survey. August 2002.
 - E Proposed RLA site plan, 8½ x 11 inches (not to scale)
 - F Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - G Plat "B" Prepared for Ed Gire Ground Elevation Survey Proposed Building Site prepared by F. Wayne Ward dated January 14, 2004
 - H Topographic Survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010
 - I Excerpts of Illinois Aviation Safety Rules (92 Ill. Admin. Code Part 14)
 - J Jones RLA Imaginary Surfaces (staff illustration)
 - K Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011
 - L Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
 - M Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23,2010
 - N Preliminary Draft Summary of Evidence for Case 688-S-11

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- 5. Supplemental Memorandum for related Case 687-AM-11 dated June 16, 2011, with attachments:
 - A Draft 1973 Land Cover for Subject Property and Vicinity
 - B Stream Related Soils for Subject Property and Vicinity
 - C Topography for Subject property and Vicinity
 - D Area Below Base Flood Elevation for Subject Property and Vicinity
 - E Draft Composite sketch Map of CR District Suitability for Subject Property and Vicinity
 - F Draft Sketch Map of Areas Most Suitable for CR District for Subject Property and Vicinity
 - G Best Prime Farmland Soils for Subject Property and Vicinity
- 6. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 5, 2011, with attachments:
 - A Draft Minutes of June 16, 2011, public hearing (included separately)
 - B Photographs submitted by Jean Fisher at the public hearing on June 16, 2011
 - C Photographs submitted by Julia Wright Hall at the public hearing on June 16, 2011
 - D Photographs submitted by Jean Fisher on July 5, 2011
 - E Written material submitted by Jean Fisher on July 11, 2011
 - F Letter to Zoning Board of Appeals submitted by Larry Hall on August 1, 2011
 - G Letter to Zoning Board of Appeals submitted by Julia Wright Hall on August 1, 2011, with attachments:
 - (1) Database information of single engine aircraft accidents in Illinois from 01/10 to 7/31/11
 - (2) Five Year Comparative U.S. Civil Helicopter Safety Trends
 - (3) FAA National Wildlife Strike Database Query Results
 - (4) Switchboard article
 - (5) EPA Regulatory Announcements
 - (6) Photograph of property
 - (7) Photograph of berm vegetation
 - (8) Letter from Daniel M. Cothern, Keller Williams Real Estate
 - H 6/21/11 Staff Mark Up of Proposed Site Plan
- 7. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 11, 2011, with attachments:
 - A Cover Letter and Revised Site Plan received August 11, 2011
 - B Email and cover letter date August 11, 2011, from Alan Singleton with attachments:
 - (1) Noise levels and property value summary
 - (2) Safety summary
 - (3) Letter dated August 10, 2011, in support of Cases 687-AM-11 and 688-S-11 from Ben Shadwick (petitioner in related Case 690-S-11)
 - (4) Letter in support of Phillip and Sara Jones from Chuck and Shelley Sollers (petitioners in related Case 689-S-11)
 - (5) Letter dated August 9, 2011, in support of Cases 687-AM-11 and 688-S-11 from neighbor Carl Brown

- (6) Webpage from the Experimental Aircraft Association (EAA) regarding aviation fuels and auto fuel STC information
- (7) Animal Outfitters web pages
- (8) Photograph of Fisher property
- C Email dated August 9, 2011, from penny Castillo to Jean Fisher
- D Webpage from the Illinois Department of Agriculture Entitled Agrichemical Facilities Containment Program
- E Effects of Jet Engine Noise on Hearing Thresholds. Pakistan Journal of Otolarynology. Vol. 2010. (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- F Web page from eHow.com entitled *Harmful Effects of Jet Engine Noise* (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- G Effects of Aircraft Noise and Sonic Booms On Domestic Animals and Wildlife: A Literature Synthesis. Engineering and Services Center, U.S. Air Force and Fish and Wildlife Services, U.S. Department of the Interior. June 1988. (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- 8. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 15, 2011, with attachments:
 - A Cover letter dated August 11, 2011, from Alan Singleton with attachments:
 - (1) Sec. 160.160 of the Illinois Administrative Code
 - (2) Appendix A to Section 16 of the Illinois Administrative Code
 - B Letter dated August 11, 2011, from Jackie Harbin of the Hillard Agency, Inc.
 - C Letter of concern dated August 9, 2011, from Stephen R. Gast
 - D Petition of opposition to the proposed rezoning submitted by Larry Hall
 - E Diagram illustrating the slope of the berm on the Jones property submitted by Larry Hall
 - F Email from Jean Fisher received on August 12, 2011
- 9. Letter of support from Jud Nogle received August 26, 2011
- 10. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated November 10, 2011
- 11. Revised Site Plan received December 14, 2011
- 12. Revised Site Plan received December 16, 2011
- 13. Letter from Linda K. Schumm, IDOT-Division of Aeronautics, received February 27, 2012
- 14. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated May 23, 2012 with attachment: A Excerpt from Special Use Permit Application received April 29, 2011
- 15. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 10, 2012

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- 16. Email from Alan Singleton to Andrew Kass sent at 4:34PM Friday, November 9, 2012, with attached copy of letter dated March 30, 2012, from John Hall
- 17. Plan and Profile of Landing Area received November 9, 2012
- 18. Cover Letter from F. Wayne Ward, P.E., received November 14, 2012, with attachments:
 - A Revised Legal Description
 - B Revised Plan and Profile of Landing Area
- 19. Revised Plan and Profile of Landing Area received November 19, 2012
- 20. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated December 6, 2012, with attachments:
 - A Revised Plan and Profile of Landing Area received November 19, 2012
 - B Proximity to Nearest Dwelling (included separately)
 - C Excerpts from the Kane County, Illinois Zoning Ordinance
 - D Goals, Objectives, and Policies excerpted from the Champaign County Land Resource Management Plan (included separately)
 - E 12/6/12 Revised Draft Summary of Evidence for Case 688-S-11 (included separately)
 - F 12/6/12 Revised Finding of Fact for Case 687-AM-11 (included separately)
- 21. Handout from Petitioner's Attorney Alan Singleton received at the December 13, 2012, public hearing, with attachments:
 - A Letter from J.C. Crawford
 - B Letter from Jongin Kim Craggs
 - C Letter from Linda K. Schumm, IDOT-Division of Aeronautics, dated February 24, 2012
 - D Applicable Case Law Summary
 - E Wright v. County of Winnebago Case Summary
 - F County of Lake v. First National Bank of Lake Forest Case Summary
 - G Jones RLA Special Conditions
 - H RLAs in and around Champaign County (various maps and images)
 - I News-Gazette article dated August 31, 2011
 - J News-Gazette article dated October 26, 2011
- 22. Sport Aviation Magazine article from the July 2010 issue titled "Grass Landing" written by Bob O'Quinn, submitted by Larry Hall at the December 13, 2012, public, hearing
- 23. Diagram and photo submitted by Larry Hall at the December 13, 2012, public hearing
- 23. "Native Trees of the Midwest" article from the Morton Arboretum website submitted by Jean Fisher at the December 13, 2012, public hearing

- 24. IDOT Aviation Safety Rules guidebook submitted by Linda Schumm at the December 13, 2012, public hearing
- 25. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated March 8, 2013, with attachments:
 - A AS APPROVED minutes for Cases 687-AM-11 and 688-S-11 excerpted from the minutes of the December 13, 2012, public hearing
 - B Handout from Petitioner's Attorney Alan Singleton received at the December 13, 2012, public hearing; indicated on ZBA website (included only for the Board but available upon request and on the ZBA website for 12/13/12 meeting as "687-AM-11 & 688-S-11 Handout")
 - C Plan and Profile Of Landing Area Annotated To Illustrate Proposed Separations
 - D Proximity to Runway Aero-Place Subdivision
 - E Plan and Profile Of Landing Area Annotated To Illustrate Likely Impacts To CR District Habitat
 - Excerpts including Sheet 82 of 85 and pps. 137-138 and Table 11 from the *Soil Survey of Champaign County, Illinois*. United States Department of Agriculture Natural Resources Conservation Service. 2003.
 - F pp. 8,9, 54, 55 from Field Guide to Native Oak Species of Eastern North America, Stein, John and Denise Binion and Robert Acciavatti. USDA Forest Service. January 2003
 - G Native Trees of the Midwest from the Morton Arboretum located in Lisle, Illinois
 - H Sport Aviation Magazine article from the July 2010 issue titled "Grass Landing" written by Bob O'Quinn, submitted by Larry Hall at the December 13, 2012, public, hearing
- 26. Letter from Anne Haaker, Illinois State Historic Preservation Agency, to Andy Kass, Associate Planner, received March 11, 2013
- 27. Letter dated March 11, 2013, from the Petitioner's Attorney Alan Singleton received March 12, 2013, with attachments:
 - A Revised Site Plan (Plan Profile)
 - <u>B</u> <u>Letter from Arborist Greg Durst</u>
 - C News-Gazette Article from January 22, 2013, "Van Hits Residence, Overturns"
- 28. NRCS Codes 645 and 647
- 29. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated March 14, 2013, with attachments:
 - A <u>Letter dated March 11, 2013, from the Petitioner's Attorney Alan Singleton received March 12, 2013, with attachments:</u>
 - (1) Revised Site Plan (Plan Profile)
 - (2) Letter from Arborist Greg Durst
 - (3) News-Gazette Article from January 22, 2013, "Van Hits Residence, Overturns"
 - B Plan and Profile of Landing Area (Revised 3/12/13) Annotated to Illustrate Proposed Separations

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- C Survey Exhibit for Dr. Phillip Jones received August 19, 2009, from Koehler Professional Engineers & Land Surveyors
- D Letter received March 11, 2013, from Illinois Historic Preservation Agency
- E Additional Evidence Related to Suitability and Injury to the District
- F Summary Finding of Fact for Case 687-AM-11
- G Item 23 addition to Case 687-AM-11 Finding of Fact and Final Determination
- 30. Handout from Petitioner's Attorney Alan Singleton received at the March 14, 2013, public hearing, with attachments:
 - A Summary of new site plan shifting RLA 36 feet further south of Larry Hall home
 - B New site plan shifting 36 feet south
 - C Traffic counts on Route 130 (1.2 million) compared to RLA
 - D Local newspaper article summarizing van striking a residence
 - E Picture of exhibits shown at hearing relative weights of Jones aircraft (less than 4000 pounds) to a 80,000 pound semi that legally travel Route 130
 - F Map showing that the center of Route 130 is closer to Hall home than the center of the runway extended (170 feet vs. 203 feet)
 - G Map showing that the Hall home is closer to the zoning setback from the highway than it is to the runway safety area (85 feet vs. 143 feet)
 - H Letter from arborist providing that the trees at the west end of the RLA will not grow further and the RLA will not harm the forest
 - Summary of the possible positive effect of moving the RLA to the south 36 feet in terms of vegetation
 - J Memo addressing the article on grass height that Larry Hall submitted from the United Kingdom
 - K Proposed special condition that Petitioners adopt a land management plan, as well as information on the possible plan
 - L memo on spot zoning property is contiguous to AG-1 and proposed rezoning would not be spot zoning
 - M Picture of some of the seedlings planted by petitioner on their homestead
 - N Map showing a total of 1,009 trees that have been recently planted on petitioners property
 - O Summary and documentation of the 31.8 acres Dr. Jones has in conservation programs
- 31. Tree information, emails, and aircraft details submitted by Julian Wright-Hall at the March 14, 2013, public hearing
- 32. Assessor information, news article, and photographs submitted by Jean Fisher at the March 14, 2013, public hearing
- 33. Letter, notes, grass landing article, photographs, and Illustrations A and G-2 from the Illinois Administrative Code submitted by Larry Hall at the March 14, 2013, public hearing
- 34. Large illustrative photograph submitted by March Fisher at the March 14, 2013, public hearing

- 35. Large illustrative photograph submitted by Jean Fisher at the March 14, 2013, public hearing
- 36. Large folder submitted by the petitioners Attorney at the March 14, 2013, public hearing with the following documents:
 - A Bell OH-58 Kiowa Helicopter Wikipedia Article. www.wikipedia.org.
 - Bell OH-58 Kiowa description from Aviation Enthusiast Corner. www.aero-web.org.
 - <u>C</u> Aircraft Performance Data for Cessna 210F Centurion '66. www.whattofly.com.
 - D Cessna 210 Wikipedia Article. www.wikipedia.org.
 - Excerpts from Commercial Driver's Study Guide (pages 9 and 10).
 - F Noise Level & Property Value Summary (see Attachment B(1) of the August 11, 2011, Supplemental Memo for Cases 687-11-AM & 688-S-11)
 - G Safety Summary (see Attachment B(2) of the August 11, 2011, Supplemental Memo for Cases 687-11-AM & 688-S-11)
 - H Annual Review of U.S. General Aviation Accident Data, 2005. National Transportation Safety
 Board.
 - I Annual Review of U.S. General Aviation Accident Data, 2004. National Transportation Safety

 Board.
 - J Annual Review of U.S. General Aviation Accident Data, 2003. National Transportation Safety Board.
 - K 2009 County Summary of Crash Reports, Report No: SDM-ERC113. Illinois Department of Transportation.
 - L Advisory Circular No: 93-2, Appendix I and II, Federal Aviation Administration
 - M Advisory Circular No: 36-3H, Appendix 1 and 2, Federal Aviation Administration
 - N Hearing Loss Protection for Agricultural Workers. Texas Cooperative Extension, *The Texas A&M University System*.
 - O Decibel Levels of Common Sounds article from home earthlink.net
 - P Understanding Sound and Noise from quietrock.com
 - Q <u>Decibel (Loudness) Comparison Chart from gcaudio.com</u>
 - R Darren Mildoon, The Impact of Airport Noise on Residential Property Values: A Case Study of the Portland-Hillsboro Airport, June 2003.
 - Daniel P. McMillen, Airport Expansions and Property Values: the Case of Chicago O'Hare
 Airport. Journal of Urban Economics, October 15, 2003.
 - T Community Tool. Noisequest from noisequest.psu.edu
 - U Alexandra Lazic & Richard Golaszeweski, A Technical Note on Aircraft Noise and Its Cost to Society. GRA, Incorporated.
 - V Car Crashes into House. The News-Gazette, October 21, 2010.
 - W Car Crashes into St. Causes Gas Leak, Kane County Chronicle, May 31, 2011.

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- X Illinois Car Accident 15 Year Old Crashes Vehicle into House, Later Cleared of Wrongful
 Death. Chicago Personal Injury Lawyer Blog.
- Y Airport Noise, Safety, and Airport Land Use Planning. Aircraft owners and Pilots Association from www.aopa.org.
- Z Christa L. Coppola, Noise in the Animal Shelter Environment: Building Design and the Effects of Daily Noise Exposure. Journal of Applied Animal Welfare Science.
- 37. Property Management Plan received March 22, 2013, from Bruce Stikkers, Champaign County SWCD, with attachments:
 - A NRCS Code 645
 - B NRCS Code 647
 - C NRCS Code 338
 - D NRCS Code 666
- 38. Letter from Larry Hall & Julia Wright-Hall received April 15, 2013, with attachments
- 39. Supplemental Memorandum for Cases 687-AM-11 & 688-S-11 dated April 17, 2013 with attachments:
 - A Letter submitted by Larry Hall at March 14, 2013 public hearing
 - B Emails & tree information submitted by Julia Wright-Hall at the March 14, 2013, public hearing (included separately)
 - C Letter from Larry Hall & Julia Wright-Hall received April 15, 2013, with attachments (included separately; full attachments only included for ZBA members but are available on website)
 - D Phil Jones Property Management Plan received March 22, 2013 (included separately)
 - E Site map of trees planted by Jones Family received March 14, 2013 (included separately)
 - F Plan And Profile Of Landing Area (Revised Site Plan) received March 12, 2012
 - G Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate
 Proposed Separations
 - H Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate
 Likely Impacts To CR District Habitat
 - Illustration of extent of Affected Woodlands under the Western Approach Area. Annotated Excerpt from the Soil Survey of Champaign County, Illinois. United States Department of Agriculture Natural Resources Conservation Service. 2003.
 - J Likely Impacts Of Proposed Special Use Permit On The Scenic And Natural Areas In The CR

 <u>District</u>
 - K Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate
 Areas Proposed for Rezoning That Are Best Suited For CR District
 - L Revised Draft Summary of Evidence for Case 688-S-11 (included separately)
 - M Revised Draft Finding of Fact for Case 687-AM-11 (included separately)
 - N Draft minutes for Cases 687-AM-11 and 688-S-11 for the March 14, 2013, public hearing (included separately)

FINDINGS OF FACT

From the documents of record and the testimony and exhibits received at the public hearing for zoning case 688-S-11 held on June 16, 2011, August 11, 2011, November 10, 2011, May 31, 2012, August 16, 2012, December 13, 2012, March 14, 2013, and April 25, 2013, the Zoning Board of Appeals of Champaign County finds that:

HER	requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED EIN} is so designed, located, and proposed to be operated so that it {WILL NOT / WILL} be ous to the district in which it shall be located or otherwise detrimental to the public health, safety,
and w	relfare because:
a.	The street has {ADEQUATE / INADEQUATE} traffic capacity and the entrance location has {ADEQUATE / INADEQUATE} visibility.
b.	Emergency services availability is {ADEQUATE / INADEQUATE} {because 1}:
c.	The Special Use will be designed to {CONFORM / NOT CONFORM} to all relevant County ordinances and codes.
d.	The Special Use {WILL / WILL NOT} be compatible with adjacent uses {because}:
e.	Surface and subsurface drainage will be {ADEQUATE / INADEQUATE} {because }:
f.	Public safety will be {ADEQUATE / INADEQUATE} {because 1}:
h.	The provisions for parking will be {ADEQUATE / INADEQUATE} {because} }:

(Note: The original application for these cases pre-dates the recent amendment that modified criteria #2 and the Final Determination should be based on the Ordinance that was in place at the time of application.)

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- 3a. The requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT} conform to the applicable regulations and standards of the DISTRICT in which it is located.
- 3b. The requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT} preserve the essential character of the DISTRICT in which it is located because:
 - a. The Special Use will be designed to {CONFORM / NOT CONFORM} to all relevant County ordinances and codes.
 - b. The Special Use {WILL / WILL NOT} be compatible with adjacent uses.
 - c. Public safety will be {ADEQUATE / INADEQUATE}.
- 4. The requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {IS / IS NOT} in harmony with the general purpose and intent of the Ordinance because
 - a. The Special Use is authorized in the District.
 - b. The requested Special Use Permit {IS/ IS NOT} necessary for the public convenience at this location.
 - c. The requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} is so designed, located, and proposed to be operated so that it WILL NOT be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare.
 - d. The requested Special Use Permit {SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} DOES preserve the essential character of the DISTRICT in which it is located.
- 5. The requested Special Use {IS/ IS NOT} an existing nonconforming use.
- 6. Regarding necessary waivers of standard conditions:
 - A. Regarding the requested waiver of the standard condition in Section 6.1.3 for an RLA that requires compliance with Footnote 11 of Section 5.3 regarding maintenance of vegetation that obstructs the west approach slope of the proposed RESTRICTED LANDING AREA:
 - (1) The waiver {SUBJECT TO THE PROPOSED SPECIAL CONDITION IS / IS NOT} in accordance with the general purpose and intent of the Zoning Ordinance and {WILL / WILL NOT} be injurious to the neighborhood or to the public health, safety, and welfare {because*}:
 - (2) Special conditions and circumstances {DO/DO NOT} exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district {because*}:
 - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied {WILL / WILL NOT} prevent reasonable or otherwise permitted use of the land or structure or construction {because*}:

- (4) The special conditions, circumstances, hardships, or practical difficulties {DO/DO NOT} result from actions of the applicant {because*}:
- (5) The requested waiver {SUBJECT TO THE PROPOSED SPECIAL CONDITION IS / IS NOT} the minimum variation that will make possible the reasonable use of the land/structure {because*}:
- 7. {NO SPECIAL CONDITIONS ARE HEREBY IMPOSED / THE SPECIAL CONDITIONS IMPOSED HEREIN ARE REQUIRED TO ENSURE COMPLIANCE WITH THE CRITERIA FOR SPECIAL USE PERMITS AND FOR THE PARTICULAR PURPOSES DESCRIBED BELOW}

FINAL DETERMINATION

The Champaign County Zoning Board of Appeals finds that, based upon the application, testimony, and other evidence received in this case, that the requirements of Section 9.1.11B. for approval {HAVE / HAVE NOT} been met, and pursuant to the authority granted by Section 9.1.6 B. of the Champaign County Zoning Ordinance, determines that:

The Special Use requested in Case 688-S-11 is hereby {APPROVED/ APPROVED WITH CONDITIONS/ DENIED} to the petitioners Philip W. and Sarabeth F. Jones to authorize the construction and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and helicopter use for public safety assistance as needed and with limited helicopter use for personal use as a Special Use; and with a waiver of a Special Use standard condition required by Section 6.1 that requires compliance with Footnote 11 of Section 5.3, {WITH WAIVERS AND SPECIAL CONDITIONS AS FOLLOWS}

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:

Eric Thorsland, Chair Champaign County Zoning Board of Appeals

ATTEST:

Secretary to the Zoning Board of Appeals

Date

687-AM-11

FINDING OF FACT AND FINAL DETERMINATION

of

Champaign County Zoning Board of Appeals

Final Determination: {RECOMMEND ENACTMENT / RECOMMEND DENIAL}

Date: April 25, 2013

Petitioners: Philip W. and Sarabeth F. Jones

Request: Amend the Zoning Map to change the zoning district designation from CR

Conservation Recreation to AG-1 Agriculture to authorize a Restricted Landing

Area in related Case 688-S-11.

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FINDING OF FACT

From the documents of record and the testimony and exhibits received at the public hearing conducted on June 16, 2011, August 11, 2011, November 10, 2011, May 31, 2012, August 16, 2012, December 13, 2012, March 14, 2013, and April 25, 2013, the Zoning Board of Appeals of Champaign County finds that:

*1. The petitioners Philip W. and Sarabeth F. Jones own the subject property.

(Note: asterisk indicates items of evidence that are identical to evidence in Case 688-S-11)

- *2. Regarding the subject property where the special use is proposed to be located:
 - A. The subject property is an approximately 14 acre tract of land that is located in the North Half of the South Half of the Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois Route 130 (CR1600E) and 1,328 feet south of the intersection of Illinois Route 130 and CR 200N and County Highway 16 and commonly known as the property at 175N CR1600E, Villa Grove.
 - B. The subject property is directly south of and abuts the petitioner's approximately 37.80 acre residential / agricultural property that is also located at 175N CR1600E, Villa Grove.
- *3. The subject property is not located within the one and one-half mile extraterritorial jurisdiction of a municipality with zoning.
- 4. Regarding comments by petitioners, when asked on the petition what error in the present Ordinance is to be corrected by the proposed change, the petitioner has indicated:
 - A. "The land should be rezoned to AG-1 because it is used for commercial agriculture. The applicant is growing hay on the land and the selling it to third parties, the land is also enrolled in government agricultural programs related to subsidized hay production. The applicant is engaged in many other activities related to agriculture, such as pollination and crop inspection, which are now restricted because of the limitations of use of the CR District. The property has overall elevation higher than the Base Flood Elevation of 654.5 and therefore should be excluded from the Special Flood Hazard Area."
- 5. Regarding comments by the petitioner when asked on the petition what other circumstances justify the rezoning the petitioner has indicated the following:
 - A. "Even though the land is not considered best prime farmland for Champaign County, it is very suitable for agricultural activities, particularly of the type activities applicant is engaged in- growing and selling hay. This type of use prevents erosion and sedimentation. In addition, if rezoned, the land would serve the agricultural needs of the applicant's other agricultural properties and activities as the applicant will be applying for an RLA special use permit, which would not be permissible with current zoning."

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B. "Commercial agriculture is the highest and best use of land in the rural areas of Champaign County. Rezoning to AG-1 allows for more efficient use of the land whether as a matter of right (plant nursery, advertising signs, tree sales lot) or with special use permit (e.g., RLA permit, among many others). Applicant would like to be able to take advantage of all of these commercially beneficial activities, encouraged by the Land Use Regulatory Policies."

GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY

- *6. Land use and zoning on the subject property and in the vicinity are as follows:
 - A. The subject property and the petitioner's adjacent residential/ agricultural property are currently zoned CR Conservation Recreation and are in use as a residential property with horses and pasture.
 - B. Land on the north, south, and west of the petitioner's adjacent residential/agricultural property is also zoned CR Conservation Recreation and is in use as follows:
 - (1) Land on the north has been divided into residential lots. Most of these lots were formerly part of the petitioner's residential/agricultural property and two of those lots are now owned by others.
 - (2) The residential lots on the north also occupy most of the west boundary but some of the land bordering on the west is the wooded bottomland for the East Branch of the Embarras River.
 - C. Zoning and land use east of the petitioner's adjacent residential/agricultural property and north of the subject property is as follows:
 - (1) Land to the east of the subject property is zoned AG-1 and is in use as farmland.
 - (2) Land east of the petitioner's adjacent residential/ agricultural property and north of the subject property is zoned CR and has been divided into residential lots. The dwelling on the nearest lot is only approximately 107 142.65 feet from the easternmost Runway Safety Area for the proposed RLA.
- 7. There have been no zoning cases in the vicinity of the subject property.
- *8. Regarding the proposed RESTRICTED LANDING AREA (RLA) in related Case 688-S-11:
 - A. The revised Plan and Profile of Landing Area (revised site plan) received November 19, 2012, March 12, 2013, includes the following:
 - (1) A 100' × 1640' 1600' runway proposed to be located 85 120.65 feet south of the north property line.

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REVISED DRAFT 4/17/13

Item 8.A. (continued)

- (3) Threshold markings at the east and west end of the runway.
- (4) A $100^{\circ} \times 100^{\circ}$ hangar north of the runway on the adjacent property.
- (5) The driveway off of Route 130 that leads to the petitioner's residence on the adjacent property.
- (6) Two 85' One 120.65 feet wide side transition on the north and one 85 feet wide side transition on the south side of the runway. The south side transition is not entirely on the petitioner's property, 13.35 49 feet will be on the adjacent property.
- B. The amended request is for construction and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and also for helicopter use for public safety assistance as needed and with limited helicopter use for personal use.

GENERALLY REGARDING THE EXISTING AND PROPOSED ZONING DISTRICTS

- 9. Regarding the existing and proposed zoning districts:
 - A. Regarding the general intent of zoning districts (capitalized words are defined in the Ordinance) as described in Section 5 of the Ordinance:
 - (1) The CR Conservation-Recreation DISTRICT is intended to protect the public health by restricting development in areas subject to frequent or periodic floods and to conserve the natural and scenic areas generally along the major stream networks of the COUNTY.
 - (2) The AG-1 Agriculture DISTRICT is intended to protect the areas of the COUNTY where soil and topographic conditions are best adapted to the pursuit of AGRICULTURAL USES and to prevent the admixture of urban and rural USES which would contribute to the premature termination of AGRICULTURAL pursuits.
 - B. Regarding the general locations of the existing and proposed zoning districts:
 - (1) The AG-1 District is generally located throughout the county in areas which have not been placed in any other Zoning Districts.
 - (2) The CR district is generally located in natural and scenic areas prone to flooding.
 - C. The suitability of the subject property for the CR District was analyzed in the Supplemental Memorandum dated 6/16/11 using land cover, topography, and 100-year floodplain and in the Supplemental Memorandum dated April 17, 2013, based on considerations related to the proposed Special Use Permit (Restricted Landing Area). The subject property was not

found to be an area "most suitable for the CR District" using those following factors and with following result:

- (1) The analysis in the Supplemental Memorandum dated 6/16/11 can be summarized as follows:
 - (a) 1973 Land Cover. The CR District was planned in 1973 and thus was based on the pattern of vegetation that existed at that time. Comparing the 1973 aerial photo to the 2008 aerial photo reveals that the vegetative land cover on the subject property and in the vicinity was almost the same in 1973 as it is today. Except for a small area of permanent vegetation at the west end, the subject property was nearly all farmland in 1973 and remains so today.
 - (b) Topography. Topography (the surface of the ground) is generally the clearest indication of the major stream networks in the County particularly at locations further downstream where the river valley has the best defined form. LIDAR topographic contours at two feet intervals for the subject property and vicinity were compared to the 2008 aerial photo. The contours indicate that the stream valley is clearly defined only on the south side of the river and not well defined on the north side of the stream. The subject property appears to be nearly flat.
 - (c) Area Below the Base Flood Elevation. The area below the Base Flood Elevation is the actual 100-year flood plain. A topographic survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010, that was included with the Preliminary Memorandum for Case 688-S-11 includes a total of 6 spot elevations and indicates that only about the west 185 feet of the subject property is below the Base Flood Elevation of 654.5 feet mean sea level. However, LIDAR remote sensing topographic data from the Champaign County GIS Consortium included in the Supplemental Memorandum dated 6/16/11 indicated that about the west 400 feet of the area proposed for rezoning is at or below the Base Flood Elevation.
- (2) The analysis in the Supplemental Memorandum dated 4/17/13 can be summarized as follows:
 - (a) The area where the hangar is proposed is indicated as "very highly suited" to the CR District based on the vegetation.
 - (b) The west 600 feet of the area proposed for rezoning is indicated as "highly suited" to the CR District based on (1) the minimum separation required to ensure that the Approach Area for a Restricted Landing Area would not interfere with adjacent woodlands based on site index of 80 feet and (2) the area below the Base Flood Elevation. Note that this results in a runway of only 1,270 feet which is less than the minimum IDOT requirement of 1,600 feet.

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Item 9.C.(2) (continued)

- (c) An area indicated as "highly suited based on compatibility of proposed Special Use Permit with the adjacent dwelling". Note that this is the area within 230 feet of the adjacent dwelling at 177 CR1600E (the Larry and Julia Wright-Hall dwelling) based on the compatibility of the proposed RLA with that dwelling.
- D. Regarding the different uses that are authorized in the existing and proposed zoning districts by Section 5.2 of the Ordinance:
 - (1) There are 10 types of uses authorized by right in the AG-1 District and there are 6 types of uses authorized by right in the CR District:
 - (a) The following 10 uses are authorized in the AG-1 District (asterisk indicates uses also authorized by right in the CR District):
 - *Single family dwellings;
 - *Subdivisions of three lots or less;
 - *Agriculture;
 - *Roadside Stand operated by Farm Operator;
 - Minor Rural Specialty Business;
 - Plant Nursery
 - Christmas Tree Sales Lot;
 - Off-premises sign within 660 feet of interstate highway;
 - Off-premises sign along federal highway except interstate highways;
 and
 - *Temporary Uses
 - (b) The only used authorized by-right in the CR District that is not also authorized by-right in the AG-1 District is Public Park or Recreation Facility.
 - (c) The uses authorized by-right in the AG-1 District should be compatible with the uses authorized by-right in the CR District.
 - (2) There are 39 types of uses authorized by Special Use Permit (SUP) in the AG-1 District and 28 types of uses authorized by SUP in the CR District:
 - (a) The following 39 uses map be authorized by SUP in the AG-1 District (asterisk indicates uses also authorized by right in the CR District):
 - *Hotel with no more than 15 lodging units;
 - Residential Planned Unit Development;
 - *Major Rural Specialty Business;
 - *Artificial lake of one or more acres;
 - *Mineral extraction, quarrying, topsoil, removal, and allied activities;
 - *Elementary School, Junior High School, or High School;

- *Church, Temple, or church related temporary uses on church property;
- *Municipal or Government Building;
- Adaptive Reuse of Government buildings for any use permitted by right;
- Penal or correctional institution;
- *Police station or fire station:
- *Library, museum or gallery;
- Public park or recreational facility;
- *Sewage disposal plant or lagoon;
- Private or commercial transmission and receiving tower (including antennas) over 100 feet in height;
- Radio or Television Station:
- *Electrical Substation;
- *Telephone Exchange;
- Residential Airport;
- Restricted Landing Area;
- Heliport-Restricted Landing Area;
- Farm Chemicals and Fertilizer Sales;
- Livestock Sales Facility and Stockyards;
- Slaughter Houses;
- Grain Storage Elevator and Bins;
- *Riding Stable;
- *Commercial Fishing Lake;
- Cemetery or Crematory;
- *Pet Cemetery;
- *Kennel;
- Veterinary Hospital;
- Off-premises sign farther than 660 feet from an interstate highway;
- Contractors Facilities with no outdoor operations or storage;
- Contractors Facilities with outdoor operations and/or storage;
- *Small Scale Metal Fabricating Shop;
- Gas Turbine Peaker;
- Big Wind Turbine (1-3 turbines);
- Wind Farm;
- Sawmills, Planing Mills, and related activities; and
- Pre-Existing Industrial Uses (existing prior to October 10, 1973)

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Item 9.D.(2) (continued)

- (b) The following uses are authorized by SUP in the CR District but not in the AG-1 District:
 - Public Fairgrounds;
 - Resort or Organized Camp;
 - Bait Sales;
 - Country club or golf course;
 - Country Club Clubhouse;
 - Lodge or private club;
 - Outdoor commercial recreational enterprise (except amusement park);
 - Public Camp or picnic area;
 - Seasonal hunting or fishing lodge;
- (c) Any Special Use that is proposed on the subject property in the AG-1
 District can be evaluated on a case by case basis for compatibility with the adjacent CR District uses. A Restricted Land Area has been proposed as a Special Use Permit (Case 688-S-11) in conjunction with the proposed map amendment and many LRMP Objectives and policies are intended to apply to "discretionary approvals" and so this map amendment will be evaluated on the basis of the "by-right uses" and on the basis of the proposed Special Use Permit.

GENERALLY REGARDING THE LRMP GOALS, OBJECTIVES, AND POLICIES

- 10. The Champaign County Land Resource Management Plan (LRMP) was adopted by the County Board on April 22, 2010. The LRMP Goals, Objectives, and Policies were drafted through an inclusive and public process that produced a set of ten goals, 42 objectives, and 100 policies, which are currently the only guidance for amendments to the Champaign County Zoning Ordinance, as follows:
 - A. The Purpose Statement of the LRMP Goals, Objectives, and Policies is as follows:

"It is the purpose of this plan to encourage municipalities and the County to protect the land, air, water, natural resources and environment of the County and to encourage the use of such resources in a manner which is socially and economically desirable. The Goals, Objectives and Policies necessary to achieve this purpose are as follows:"

- B. The LRMP defines Goals, Objectives, and Polices as follows:
 - (1) Goal: an ideal future condition to which the community aspires
 - (2) Objective: a tangible, measurable outcome leading to the achievement of a goal

- (3) Policy: a statement of actions or requirements judged to be necessary to achieve goals and objectives
- C. The Background given with the LRMP Goals, Objectives, and Policies further states, "Three documents, the *County Land Use Goals and Policies* adopted in 1977, and two sets of *Land Use Regulatory Policies*, dated 2001 and 2005, were built upon, updated, and consolidated into the LRMP Goals, Objectives and Policies."

REGARDING LRMP GOALS & POLICIES

11. LRMP Goal 1 is entitled "Planning and Public Involvement" and states that as follows:

Champaign County will attain a system of land resource management planning built on broad public involvement that supports effective decision making by the County.

Goal 1 is always relevant to the review of the LRMP Goals, Objectives, and Policies in land use decisions but is otherwise *NOT RELEVANT* to the proposed rezoning. (Note: bold italics typeface indicates staff's recommendation to the ZBA)

12. LRMP Goal 2 is entitled "Governmental Coordination" and states as follows:

Champaign County will collaboratively formulate land resource and development policy with other units of government in areas of overlapping land use planning jurisdiction.

Goal 2 has two objectives and three policies. The proposed amendment is **NOT RELEVANT** to Goal 2.

13. LRMP Goal 3 is entitled "Prosperity" and states as follows:

Champaign County will encourage economic growth and development to ensure prosperity for its residents and the region.

Goal 3 has three objectives and no policies. The proposed amendment is **NOT RELEVANT** to Goal 3.

14. LRMP Goal 4 is entitled "Agriculture" and states as follows:

Champaign County will protect the long term viability of agriculture in Champaign County and its land resource base.

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Item 14. (continued)

Goal 4 has 9 objectives and 22 policies. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Goal 4 for the following reasons:

A. Objective 4.1 is entitled "Agricultural Land Fragmentation and Conservation" and states, "Champaign County will strive to minimize the fragmentation of the County's agricultural land bas and conserve farmland, generally applying more stringent development standards on best prime farmland."

The proposed rezoning {HELP ACHIEVE / NOT HELP ACHIEVE/PREVENT ACHIEVEMENT OF } Objective 4.1 because of the following:

- Objective 4.1 has nine policies. Policies 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.7, 4.1.8, and 4.1.9 are not relevant to the proposed rezoning.
- (2) Policy 4.1.1 states "Commercial agriculture is the highest and best use of land in the areas of Champaign County that are by virtue of topography, soil, and drainage, suited to its pursuit. The County will not accommodate other land uses except under very restricted conditions or in areas of less productive soils."

The proposed rezoning WILL HELP ACHIEVE Policy 4.1.1 because the subject property is not best prime farmland and will remain partially in agricultural production, although it is unclear as to how much will be able to remain in production because of the safety recommendation to keep the grass cut to be no more than 30% of the wheel height.

- (3) Policy 4.1.6 states "Provided that the use, design, site and location are consistent with County policies regarding:
 - i. suitability of the site for the proposed use;
 - ii. adequacy of infrastructure and public services for the proposed use;
 - iii. minimizing conflict with agriculture;
 - iv. minimizing the conversion of farmland; and
 - v. minimizing the disturbance of natural areas,

then,

a) on best prime farmland, the County may authorize discretionary residential development subject to a limit on total acres converted which is generally proportionate to tract size and is based on the January 1, 2998 configuration of tracts, with the total amount of acreage converted to residential use (inclusive of by-right development) not to exceed three acres plus three acres per each 40 acres (including any existing right-of-way), but not to exceed 12 acres in total; or

- b) on best prime farmland, the County may authorize non-residential discretionary development; or
- c) the County may authorize discretionary review development on tracts consisting of other than best prime farmland."

The proposed rezoning {DOES/DOES NOT} conform with Policy 4.1.6 as follows:

- (a) The Champaign County Soil and Water Conservation District prepared a Natural Resource Report dated April 29, 2011, that indicated the subject property has an LE factor of 84 and is not considered Best Prime Farmland.
- (b) Note that the definition of "best prime farmland" in the Zoning Ordinance was later amended on November 27, 2012, and under the new definition the subject property would be considered Best Prime Farmland.
- (c) The rezoning application should be reviewed under the Ordinance that was in place at the time of application and the original applications were received on April 29, 2011, and therefore the subject property is not considered Best Prime Farmland.
- (d) The proposed use requires a Special Use Permit in the AG-1 Agriculture District, which allows consideration of site suitability, adequacy of public infrastructure and public services, conflict with agriculture, conversion of farmland, and disturbance of natural areas as part of the criterion regarding, "injurious to public health, safety, and welfare."
- (e) Achievement of Policy 4.1.6 requires achievement of related Objectives 4.2 and 4.3.
- B. Objective 4.2 is entitled "Development Conflicts with Agricultural Operations" and states, "Champaign County will require that each discretionary review development will not interfere with agricultural operations."

The proposed rezoning will **HELP ACHIEVE** Objective 4.2 because of the following:

(1) Policy 4.2.1 states, "The County may authorize a proposed business or other non-residential discretionary review development in a rural area if the proposed development supports agriculture or involves a product or service that is better provided in a rural area than in an urban area."

The proposed rezoning will **HELP ACHIEVE** Policy 4.2.1 for the following reasons:

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Item 14.B.(1) (continued)

- (a) The Land Resource Management Plan (LRMP) provides no guidance regarding what products or services are better provided in a rural area and therefore that determination must be made in each zoning case.
- (b) Regarding the proposed Restricted Landing Area (RLA) proposed in related Zoning Case 688-S-11:
 - i. An RLA is better provided in a rural area than an urban area and may be authorized in the AG-1 District with a Special Use Permit.
 - *ii.* The RLA is not primarily intended to be used for agriculture purposes but could be.
- (2) Policy 4.2.2 states, "The County may authorize discretionary review development in a rural area if the proposed development:
 - a. is a type that does not negatively affect agricultural activities; or
 - b. is located and designed to minimize exposure to any negative affect caused by agricultural activities; and
 - c. will not interfere with agricultural activities or damage or negatively affect the operation of agricultural drainage systems, *rural* roads, or other agriculture-related infrastructure."

The proposed rezoning will **HELP ACHIEVE** Policy 4.2.2 for the following reasons:

- (a) A Restricted Landing Area (RLA) such as proposed in related Zoning Case 688-S-11 does not negatively affect agricultural activities if adequate separation is provided from tall crops and adequate separation appears to be provided in Case 688-S-11.
- (b) There is no evidence to suggest that the RLA proposed in related Zoning Case 688-S-11 has not been designed to minimize exposure to any negative affect caused by agricultural activities.
- (c) There is no evidence to suggest that the RLA proposed in related Zoning Case 688-S-11 will interfere with agricultural activities or damage or negatively affect the operation of agricultural drainage systems, *rural* roads, or other agriculture-related infrastructure.
- (3) Policy 4.2.3 states, "The County will require that each proposed discretionary development explicitly recognize and provide for the right of agricultural activities to continue on adjacent land."

The proposed rezoning will *HELP ACHIEVE* Policy 4.2.3 because there is no reason to believe that the Restricted Landing Area (RLA) proposed in related Zoning Case 688-S-11 would negatively affect agricultural activities.

- (4) Policy 4.2.4 states, "To reduce the occurrence of agricultural land use and non-agricultural land use nuisance conflicts, the County will require that all discretionary review consider whether a buffer between existing agricultural operations and the proposed development is necessary."
 - The proposed rezoning will *HELP ACHIEVE* Policy 4.2.4 because there is no reason to believe that any additional buffering is required for the Restricted Landing Area (RLA) proposed in related Zoning Case 688-S-11 other than the separation that is already proposed in order to deal with tall crops.
- C. Objective 4.3 is entitled "Site Suitability for Discretionary Review Development" and states, "Champaign County will require that each discretionary review development is located on a suitable site."
 - The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVE MENT OF} Objective 4.3 because it will HELP ACHIEVE Objective 4.3 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Objective 4.3 if the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered because of the following:
 - (1) Policy 4.3.1 states, "On other than best prime farmland, the County may authorize a discretionary review development provided that the site with proposed improvements is suited overall for the proposed land use."
 - The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 4.3.1 because it will HELP ACHIEVE Policy 4.3.1 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 4.3.1 if the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered because of the following:
 - (a) As reviewed above in Item 14.A.(2)(a) the subject property is not considered Best Prime Farmland and so this Policy is applicable.
 - (b) Regarding suitability of the subject property for the proposed Restricted Landing Area (RLA):
 - i. The subject property is located such that the proposed RLA is only about 107 feet from the nearest dwelling under other ownership which is an unusually close proximity.
 - ii. The subject property is currently zoned CR Conservation Recreation and the west end of the proposed RLA will abut the remainder of the CR District which contains trees that could encroach into the approach area of the proposed RLA which could put the RLA certification by the Illinois Department of Transportation at risk.

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Item 14.C.(1) (continued)

A prudent RLA owner might acquire that land eventually so that the trees could be managed so as to prevent any encroachment and that could have a deleterious effect on the natural habitat provided by the trees and be incompatible with the purpose and intent of the CR District.

- The Revised Plan And Profile Of Landing Area (revised site plan for iii. the proposed RLA) received on 11/19/12 3/12/13 indicates that the proposed landing strip area is 85 120.65 feet south of the north property line which means that the eastern Runway Safety Area is 75 110.65 feet south of the north property line. The house at 177 CR1600E, Villa Grove, is located on the property adjacent to the north property line and that house is approximately 32 feet from the north property line of the subject property based on the side yard dimension as stated on the most recent Zoning Use Permit site plan for that property. Thus, the proposed RLA Runway Safety Area is approximately 107 142.65 feet south of the existing house at 177 CR1600E, Villa Grove. See Attachment B Proximity to Nearest Dwelling Plan and Profile of Landing Area (Revised 3/12/13) Annotated to Illustrate Proposed Separations, included with the Supplemental Memorandum dated 12/13/12 3/14/13.
- iv. The Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13 indicates that the proposed hangar is proposed to be located approximately 90-64.35 feet north of the existing north property line which makes the proposed RLA runway is 175 about 185 feet south of the proposed hangar. Thus, the petitioner's proposed hangar is proposed to be 68 42.35 feet further from the proposed RLA runway than is the nearest dwelling under different ownership. See Plan And Profile Of Landing Area Annotated To Illustrate Proposed Separations included as an Attachment to the Supplemental Memorandum dated 3/8/13 3/14/13.
- v. The Runway Safety Area is generally considered a more dangerous area than land located on either side of the runway.
- vi. IDOT requires taxiways for RLAs to be at least 85 feet from an RLA runway and requires aircraft to be parked at least 85 feet from an RLA runway. See the attachment to the Supplemental Memorandum dated 3/8/13. The nearest adjacent dwelling under other ownership (the house at 177 CR1600E, Villa Grove) is located only 22-57.65 feet further away from the RLA runway.

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- Staff reviewed a limited number of other Illinois county zoning vii. ordinances to find if any contained "minimum separation requirements from adjacent dwellings". The only minimum separation found in an ordinance was in the Kane County, Illinois Zoning Ordinance which includes both a "Private Landing Strip" and a "Restricted Landing Field". "Private Landing Strip" is a Special Use in the Farming Zoning District (F District) subject to certain restrictions such as compliance with the Illinois Department of Transportation-Division of Aeronautics requirements, limits the number of planes to 2, requires that it must be used in connection with a permitted use in the district. Additional requirements include various minimum separation distances from adjacent facilities and properties including a minimum separation of 200 feet from an adjacent residence or property line and any run up area (undefined) or blast area (undefined). Excerpts from the Kane County, Illinois Zoning Ordinance were included in Attachment C to the Supplemental Memorandum dated 12/13/12. Even if the Kane County Ordinance were applicable in this instance it is not clear whether that Ordinance would require a 200 feet separation to the adjacent dwelling because the Kane County Ordinance does not define either "run up area" or "blast area".
- viii. On December 13, 2012, the petitioner's attorney, Alan Singleton, submitted a list of 16 RLA's in and around Champaign County as evidence that "...all of them operating with no apparent problem for the neighborhoods and their residents." Regarding that list of RLA's in and around Champaign County and their proximities to dwellings under different ownership:
 - (a) Eight of the RLA's were indicated as not being located in Champaign County and six of those are located in counties that have not even adopted a zoning ordinance. A ninth RLA, the Clapper RLA, was indicated on the list as being located in Champaign County but is in fact located in Piatt County. For these properties located outside of Champaign County there was not enough time for staff to gather all of the information necessary to fully evaluate ownership and relations between adjacent properties

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Item 14.C.(1)(continued)

- (b) Day Aero-Place was originally developed as a "residential airport" and included a runway and was therefore intended to be marketed towards owners who desired a close proximity to a landing area. Five of the 10 homes in the development border the runway and their proximity to the runway varies between 85 feet and 135 feet. See the Attachment to the Supplemental Memorandum dated 3/8/13.
- (c) Regarding the other six RLAs and their proximity to the nearest dwelling under different ownership:
 - i. The Justus RLA appears to be about 130 feet from the nearest dwelling that is located on a separate tax parcel however the name of the owner of that parcel also has the last name "Justus" and so it not clear exactly what the relationship is between the two landowners.
 - ii. The Litchfield RLA appears to be about 300 feet from the nearest dwelling that is located on a separate tax parcel however the owner of that dwelling has testified in previous Champaign County Zoning Cases regarding his use of the Litchfield RLA and so the relationship is not the same as proposed in this zoning case.
 - iii. The remaining four RLAs all appear to be at least ¼ mile (1,320 feet) from the nearest dwelling under different ownership.
 - ix. Based on the evidence, the proposed RLA runway safety area is only 107 142.65 feet from the nearest dwelling under different ownership (the house at 177 CR1600E, Villa Grove) which is only 61 77% of the proposed separation to the proposed hangar and only about 811% of the typical separation for other Champaign County RLAs that were reviewed.
- (c) Refer to Item 22 for relevant testimony from the public hearings as well as information regarding letters of support and a petition of opposition that were submitted.

(2) Policy 4.3.2 states, "On best prime farmland, the County may authorize a discretionary review development provided the site with proposed improvements is well-suited overall for the proposed land use.

The proposed rezoning is **NOT RELEVANT** to Policy 4.3.2 because as reviewed above in Item 14.A.(2)(a) the subject property is not considered Best Prime Farmland.

(3) Policy 4.3.3 states, "The County may authorize a discretionary review development provided that existing public services are adequate to support the proposed development effectively and safely without undue public expense."

The proposed rezoning will **HELP ACHIEVE** Policy 4.3.3 for the following reason:

- (a) Letters of support for the proposed RLA were received from both Dan Walsh, Champaign County Sheriff, and Charlie McGrew, Douglas County Sheriff, and Bill Keller, former Champaign County Emergency Management Director. The Sheriff letters from cite the many instances when the Petitioner has provided flying service assistance in public emergency situations. None of those letters suggested anything about the various zoning issues related to impact on the immediate neighborhood but each letter make clear that having both the fixed wing (airplane) and helicopter assets conveniently available could be very valuable and an additional public safety benefit to both counties.
- (4) Policy 4.3.4 states, "The County may authorize a discretionary review development provided that existing public infrastructure, together with proposed improvements, is adequate to support the proposed development effectively and safely without undue public expense."

The proposed rezoning will **HELP ACHIEVE** Policy 4.3.4 because there is no evidence to suggest that the existing public infrastructure is not adequate to support the RLA proposed in related Zoning Case 688-S-11.

- (5) Policy 4.3.5 states, "On best prime farmland, the County will authorize a business or other non-residential use only if:
 - a. it also serves surrounding agriculture uses or an important public need; and cannot be located in an urban area or on a less productive site; or
 - b. the use is otherwise appropriate in a rural area and the site is very well suited to it."

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Item 14.C.(5) (continued)

The proposed rezoning is **NOT RELEVANT** to Policy 4.3.5 because as reviewed above in Item 14.A.(2)(a) the subject property is not considered Best Prime Farmland.

15. LRMP Goal 5 is entitled "Urban Land Use" and states as follows:

Champaign County will encourage urban development that is compact and contiguous to existing cities, villages, and existing unincorporated settlements.

The proposed amendment is *NOT RELEVANT* to Goal 5 because the proposed map amendment is for urban development.

16. LRMP Goal 6 is entitled "Public Health and Safety" and states as follows:

Champaign County will ensure protection of the public health and public safety in land resource management decisions.

Goal 6 has 4 objectives and 7 policies. Three of the objectives and 6 of the policies are clearly not relevant. The proposed amendment *WILL NOT IMPEDE* the achievement of Goal 6.

17. LRMP Goal 7 is entitled "Transportation" and states as follows:

Champaign County will coordinate land use decisions in the unincorporated area with the existing and planned transportation infrastructure and services.

Goal 7 has 2 objectives and 7 policies. The proposed amendment *WILL NOT IMPEDE* the achievement of Goal 7.

18. LRMP Goal 8 is entitled "Natural Resources" and states as follows:

Champaign County will strive to conserve and enhance the County's landscape and natural resources and ensure their sustainable use.

Goal 8 has 9 objectives and 36 polices and except as reviewed below will not be impeded by the proposed amendment. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Goal 8 for the following reasons:

A. Objective 8.5 is entitled "Aquatic and Riparian Ecosystems" and states "Champaign County will encourage the maintenance and enhancement of aquatic and riparian habitats."

The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVE MENT OF} Objective 8.5 because it will HELP ACHIEVE Objective 8.5 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Objective 8.5 if

the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered because of the following:

- (1) Objective 8.5 has 5 policies. Policies 8.5.3, 8.5.4, and 8.5.5 are not relevant to the proposed rezoning.
- (2) Policy 8.5.1 states, "For discretionary development, the County will require land use patterns, site design standards and land management practices that, wherever possible, preserve existing habitat, enhance degraded habitat and restore habitat."

The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 8.5.1 because it will HELP ACHIEVE Policy 8.5.1 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 8.5.1 if the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered because of the following:

- (a) A report received April 29, 2011, from the Champaign County Soil and Water Conservation District reports that if preventative measures are taken for erosion and sedimentation there should be no issue with water quality.
- (b) The proposed hangar, if constructed would require some of the wooded area on the subject property to be cut down.
- (c) The Petitioner testified at the August 11, 2011, public hearing that the trees will not be damaged, touched, or violated in any way during the use of the proposed RLA.
- (d) The Petitioner testified at the December 13, 2012, March 14, 2013, public hearing that he has planted over 2,500 native hardwood 1,009 trees on his property.
- (e) At the December 13, 2012, public hearing, neighbor Larry Hall stated that the 30,750 square feet area for the proposed hangar would have to be removed and the removal of these trees would destroy a substantial habitat and conservation environment.
- (f) At the December 13, 2012, public hearing, nearby landowner Jean Fisher, testified that trees along the river basin provide habitat for wildlife, stabilize ground, filter watershed, and improve water and air quality.

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Item 18.A.(2) (continued)

- (g) A portion of the CR District that is currently wooded and is 30,750 26,903 square feet (.706 acre) (.617 acre) in area is proposed to be rezoned to the AG-1 District for the construction and development of the proposed hangar. The existing vegetation in this area will necessarily be removed to allow construction of the proposed hangar and movement of aircraft to and from the hangar.
- (h) A portion of the CR District that is not currently wooded and is approximately 1.700 acres in area is proposed to remain in the CR District but is located at the west end of the proposed RLA and underneath the "Approach Area" required by IDOT. The slope of the Approach Area is 15 feet horizontal to one foot vertical and nothing is allowed to penetrate the imaginary plane of the Approach Area for a distance of 3,000 feet from the end of the RLA runway. Vegetation below the Approach Area must be maintained at a height such that it does not penetrate the Approach Area. The Approach Area is 17 18 feet above the runway on the east side of this area and approximately 43 46 feet above the runway on the west side. As indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13, the surface of the ground slopes down to the channel of the East Branch of the Embarrass River and the allowed clear height below the approach area will vary from 20 feet to 49 approximately 50 feet. It is unlikely that this area can ever have mature native trees so long as the IDOT Certificate is maintained for the proposed RLA.
- (i) A portion of the CR District that is currently wooded and is approximately 3.90 acres in area is located west of the proposed RLA and on the west side of the East Branch of the Embarrass River and this area will also be located underneath the IDOT required Approach Area. The ground elevations in this area are not indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13 so the allowable clear height is not known with any accuracy. However, the Approach Area varies in height from 43 46 feet above the runway on the east side of this wooded area to 67 85 feet in height above the runway on the west side. This land is not currently owned by the petitioner but in order to retain the IDOT Certificate for the proposed RLA the trees below the Approach Area cannot penetrate above the imaginary surface of the Approach Area and therefore trees cannot be taller than the Approach Area.
- (j) In related Case 688-S-11 the Zoning Board of Appeals found that the proposed RLA Special Use {WILL NOT / WILL} be injurious to the surrounding CR district and {IS / IS NOT} in harmony with the general purpose and intent of the Ordinance.

- (3) Policy 8.5.2 states, "The County will require in its discretionary review that new development cause no more than minimal disturbance to the stream corridor environment."
 - The proposed rezoning {WILL ACHIEVE / WILL NOT ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 8.5.2 for the same reasons as for Policy 8.5.1 above.
- B. Objective 8.6 is entitled "Natural Areas and Habitat" and states "Champaign County will encourage resource management which avoids loss or degradation of areas representative of the pre-settlement environment and other areas that provide habitat for native and game species."

The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVE MENT OF} Objective 8.6 because it will HELP ACHIEVE Objective 8.6 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Objective 8.6 if the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered because of the following:

- (1) Objective 8.6 has 6 policies. Policies 8.6.1, 8.6.5, and 8.6.6 are not relevant to the proposed rezoning.
- (2) Policy 8.6.2 states:
 - a. "For new development, the County will require land use patterns, site design standards and land management practices to minimize the disturbance of existing areas that provide habitat for native and game species, or to mitigate the impacts of unavoidable disturbance to such areas.
 - b. With regard to by-right development on good zoning lots, or the expansion thereof, the County will not require new zoning regulations to preserve or maintain existing onsite areas that provide habitat for native and game species, or new zoning regulations that require mitigation of impacts of disturbance to such onsite areas."

The proposed rezoning will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 8.6.2 because it will HELP ACHIEVE Policy 8.6.2 if only the "by-right" uses in the zoning districts are considered but it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} Policy 8.6.2 if the proposed Special Use in Case 688-S-11 (Restricted Landing Area) is considered for the same reasons as for Policy 8.5.1 above.

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Item 18.B. (continued)

- (3) Policy 8.6.3 states, "For discretionary development, the County will use the Illinois Natural Areas Inventory and other scientific sources of information to identify priority areas for protection or which offer the potential for restoration, preservation, or enhancement."

 The proposed recogning will HELP ACHIEVE Policy 8.6.3 for the following
 - The proposed rezoning will *HELP ACHIEVE* Policy 8.6.3 for the following reasons:
 - (a) The petitioner has had the Illinois Department of Natural Resources (IDNR) conduct a Natural Resource Review.
 - (b) The IDNR Natural Resource Report indicates that adverse effects on natural resources are unlikely provided compliance with all federal, state, and local environmental laws, regulations, and ordinances are complied with.
- (4) Policy 8.6.4 states, "The County will require implementation of IDNR recommendations for discretionary development sites that contain endangered or threatened species, and will seek to ensure that recommended management practices are maintained on such sites."

The proposed rezoning will *HELP ACHIEVE* Policy 8.6.4 for the following reasons:

- (a) The petitioner has had the Illinois Department of Natural Resources (IDNR) conduct a Natural Resource Review.
- (b) The IDNR Natural Resource Report indicates that adverse effects on natural resources are unlikely provided compliance with all federal, state, and local environmental laws, regulations, and ordinances are complied with.
- 19. LRMP Goal 9 is entitled "Energy Conservation" and states as follows:

Champaign County will encourage energy conservation, efficiency, and the use of renewable energy sources.

Goal 9 has 5 objectives and 5 policies. The proposed amendment is **NOT RELEVANT** to Goal 9 because the proposed amendment does not address energy efficiency or the use of renewable energy sources.

20. LRMP Goal 10 is entitled "Cultural Amenities" and states as follows:

Champaign County will promote the development and preservation of cultural amenities that contribute to a high quality of life for its citizens.

Goal 10 has 1 objective and 1 policy. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE} Goal 10 for the following reasons:

- A. Objective 10.1 is entitled "Cultural Amenities" and states "Champaign County will encourage the development and maintenance of cultural, educational, recreational, and other amenities that contribute to the quality of life of its citizens."

 The proposed rezoning will {HELP ACHIEVE/ NOT HELP ACHIEVE} Objective 10.1 for the following reason:
 - (1) Policy 10.1.1 states, "The County will work to identify historic structures, places and landscapes in the County."

The proposed rezoning will {HELP ACHIEVE/ NOT HELP ACHIEVE} Policy 10.1.1 for the following reason(s):

- (a) <u>In a letter dated March 7, 2013</u>, the State Historic Preservation Agency has requested a Phase I Archaeological Survey be done on the subject property. determined that no significant historic, architectural, or archaeological resources are located within the proposed project area.
- (b) A Phase I Archaeological Survey is the minimum work required to determine if there are important historic resources on a property.
- (c) The Petitioner has not yet provided the results of a Phase I Archaeological Survey.

GENERALLY REGARDING THE LaSalle Factors

- 21. In the case of LaSalle National Bank of Chicago v. County of Cook the Illinois Supreme Court reviewed previous cases and identified six factors that should be considered in determining the validity of any proposed rezoning. Those six factors are referred to as the LaSalle factors. Two other factors were added in later years from the case of Sinclair Pipe Line Co. v. Village of Richton Park. The Champaign County Zoning Ordinance does not require that map amendment cases be explicitly reviewed using all of the LaSalle factors but it is a reasonable consideration in controversial map amendments and any time that conditional zoning is anticipated. The proposed map amendment compares to the LaSalle and Sinclair factors as follows:
 - A. LaSalle factor: The existing uses and zoning of nearby property.

Table 1 below summarizes the land uses and zoning of the subject property and properties nearby.

Item 21.A. (continued)

Table 1: Land Use and Zoning Summary

Direction	Land Use	Zoning
Site	Hayfield	CR Conservation-Recreation
Adjacent property (also owned by applicant)	Single family dwelling w/ horses and pasture	
North	Single family residential (see the discussion of proximity under item 14.C.)	CR Conservation-Recreation
East	Farmland	AG-1 Agriculture
West	Single family residential (same as to the north) Wooded bottomland of the East Branch of the Embarras River	CR Conservation-Recreation
South	Farmland	CR Conservation-Recreation

B. LaSalle factor: The extent to which property values are diminished by the particular zoning restrictions.

- (1) It is impossible to establish values without a formal real estate appraisal which has not been requested nor provided and so any discussion of values is necessarily general.
- (2) In regards to the value of nearby residential properties, it is not clear if the requested map amendment would have any effect. In a letter received August 4, 2011, Daniel Cothern from Keller Williams Realty contends that in his professional opinion, the proposed restricted landing area would have a significant negative impact on the Hall's (adjacent neighbor) property value and will significantly diminish their ability to sell their home in the future.

A letter received August 11, 2011, from Jackie Harbin of the Hillard Agency reported that an airplane runway should not affect property values of neighboring property, but that the improvements the Jones' have made to their property should increase the neighboring property values.

A letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser at Craggs Appraisal Services, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law enforcement property values may increase because of the greater community safety.

- (3) In regards to the value of the subject property it also is not clear if the requested map amendment would have any effect.
- C. LaSalle factor: The extent to which the destruction of property values of the plaintiff promotes the health, safety, morals, and general welfare of the public.

 There have been multiple conflicting reports from real estate professionals on the effects the proposed use of the subject property would have on surrounding properties, neither of these reports are formal evaluations. The proposed rezoning and related Special Use Permit would permit a Restricted Landing Area on the subject property. The petitioner lives adjacent to the subject property and it would allow a quick response to a request for assistance in search and rescue.
- D. LaSalle factor: The relative gain to the public as compared to the hardship imposed on the individual property owner.

The relative gain to the public is that the petitioner would be able to respond to requests for assistance in search and rescue situations faster since he would not have to drive to where his aircraft are currently stored.

The hardship imposed on the property owner is that without the proposed rezoning the Restricted Landing Area cannot be established in the CR, Conservation-Recreation Zoning District.

- E. LaSalle factor: The suitability of the subject property for the zoned purposes.
 - (1) The subject property is suitable for the <u>current</u> zoned purposes. Currently, the property is used for agricultural production and will continue to be used for agricultural production if the proposed rezoning and Special Use Permit in related Case 688-S-11 are approved, although it is unclear as to how much will be able to remain in production because of the safety recommendation to keep the grass cut to be no more than 30% of the wheel height.
 - (2) Based on the discussion of suitability under item 14.C. above, the subject property is {SUITABLE/NOT SUITABLE} for the proposed zoned purpose which is a Restricted Landing Area.
- F. LaSalle factor: The length of time the property has been vacant as zoned considered in the context of land development in the vicinity of the subject property.

 The CR District was planned in 1973 and thus was based on the pattern of vegetation that existed at that time. 1973 and 2008 aerial photos were compared and it appears that the land cover in 1973 exists today on the subject property and in the vicinity. Currently, the property is agricultural production and was in 1973.

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Item 21. (continued)

G. Sinclair factor: The need and demand for the use.

The proposed use, if rezoned is a Restricted Landing Area (see related Case 688-S-11) for the petitioner's aircraft. The need and demand for the use is for personal use. In related Case 688-S-11 the Zoning Board of Appeals found that the proposed Special Use Permit {IS/ IS NOT} necessary for the public convenience.

H. Sinclair factor: The extent to which the use conforms to the municipality's comprehensive planning.

The proposed use generally conforms {CONFORMS/ DOES NOT CONFORM} to goals and policies of the Champaign County Land Resource Management Plan. The land will partially remain in agricultural production although it is unclear as to how much will be able to remain in production because of the safety recommendation to keep the grass cut to be no more than 30% of the wheel height.

REGARDING RELEVANT TESTIMONY IN THE PUBLIC HEARING

- 22. Relevant testimony in the public hearing can be summarized as follows:
 - A. Letters of support have been received from the following:
 - (1) Dan Walsh, Champaign County Sheriff.
 - (2) Bill Keller, former Champaign County Emergency Management Director.
 - (3) Charlie McGrew, Douglas County Sheriff.
 - (4) Ben Shadwick, 1004 North Fox Run, Villa Grove.
 - (5) Charles and Shelley Sollers; 507 South Harrison Street, Philo.
 - (6) Carl Brown, 1577 CR 200N, Tolono.
 - (7) Jud Nogle, 303 Jay Street, Savoy.
 - B. Letters of opposition have been received from the following:
 - (1) Larry Hall, 177 N CR 1600E, Villa Grove.
 - (2) Julia Wright Hall, 177 N CR 1600E, Villa Grove.
 - (3) Jean Fisher, 195 N CR 1600E, Villa Grove.
 - (4) Stephen R. Gast, 1580 CR 200N, Tolono.
 - C. At the August 11, 2011, public hearing adjacent landowner Larry Hall submitted a petition signed by those in opposition of the proposed rezoning in related Case 687-AM-11. He said the petition reads as follows: We, the undersigned oppose the rezoning in order to protect the existing neighborhoods in the area, preserve the property values of the homes in the existing residential neighborhoods, protect the wildlife, farm, and domestic animals in the area, preserve the scenic value as stated in the Zoning Code as one of the purposes of the Conservation-Recreation classification, protect the safety and welfare of those traveling along Route 130 and protect the safety and welfare of the homeowners in the existing neighborhoods. The following people signed the petition:

- (1) Larry & Julia Hall, 177 N CR 1600E, Villa Grove.
- (2) Danielle N. Risken, 187 CR 1600E, Villa Grove.
- (3) Damon Hood, 187 CR 1600E, Villa Grove.
- (4) Bill Yeakel, 1602 CR 700N, Villa Grove.
- (5) Mark & Jean Fisher 195 CR 1600E, Villa Grove.
- (6) Josh Fisher, 195 CR 1600E, Villa Grove.
- (7) Carol Zell, 1574 CR 100N, Villa Grove.
- (8) Karen L. Scott, 405 North Pine Street, Villa Grove.
- (9) Stephen & Letha Gast, 1580 CR 200 N, Tolono.
- (10) Martha A. Gast, 1562 CR 200N, Tolono.
- (11) Rhys G. Baker, 1562 CR 200N, Tolono.
- (12) J.D. Crawford, 1548 CR 100N, Villa Grove.
- (13) J.C. Crawford, 1545 CR 200N, Tolono. (A letter of withdrawal from JC Crawford was received on December 13, 2012).
- (14) Kenneth J. Henry Jr., 16026 CR 200N, Villa Grove.
- (15) Trent Miller, 1601 CR 200N, Villa Grove.
- (16) Shannon Wright, 1006 North Possum Trail, Villa Grove.
- (17) Darren R. Wright, 405 North Pine Street, Villa Grove.
- (18) Walt Ezell, 1574 CR 100N, Villa Grove.
- (19) Hunter Ezell, Villa Grove.
- (20) Phyllis Williams, 1548 CR 100N, Villa Grove.
- (21) Kevin Drum, 1548 CR 100N, Villa Grove.
- (22) Lisa Goin, 1548 CR 100N, Villa Grove.
- (23) Paul & Cindy Garrett, 1602 CR 200N, Villa Grove.
- (24) Wes & Donna Miller, 1603 CR 200N, Villa Grove.
- (25) Joshua Cler, 151 CR 1700E, Villa Grove.
- (26) Kerry Cheely, 1576 CR 200N, Villa Grove.
- (27) Denny Brown, 151 CR 1700E, Villa Grove.
- (28) Terry Brown, 151 CR 1700E, Villa Grove.
- (29) La Tonya Fleming, 1601 East Florida, Urbana.
- (30) Tyran Jackson, 1601 East Florida, Urbana.
- (31) Jesse Fisher, 195 CR 1600E, Villa Grove.
- (32) Christine Fisher, RR1 Fowler, Paloma.
- (33) John Liffick, 1573 CR 200N, Tolono.
- D. In a written statement read at the August 11, 2011, public hearing, neighbor Larry Hall (resident of the nearest dwelling) stated as follows:
 - (1) He and his wife Julia Hall oppose the proposed rezoning.
 - (2) If the rezoning is approved he and his wife request the following restrictions be considered for the proposed RLA and/or Heliport-RLA:
 - (a) If the Heliport-RLA is approved deny the airstrip (RLA) for fixed wing aircraft.
 - (b) Limit the use of the Heliport-RLA to only two helicopters.

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Item 22.D.(2) (continued)

- (c) If the RLA is approved he and his wife request the following restrictions be considered for the proposed RLA:
 - *i*. The RLA can only be used for personal aircraft and aircraft owned by immediate family.
 - *ii.* All identifying numbers of authorized aircraft shall be on file with the Department of Planning and Zoning.
 - iii. The landing strip shall not be paved.
 - iv. The RLA should not be used for commercial purposes but if used for crop dusting no take off or landings earlier than 7:30AM or later than 5PM and only on Monday through Friday and not on any holiday that falls on a Monday through Friday; and any commercial aircraft shall a minimum liability insurance requirement of \$5 million; and no more than two aircraft shall use the RLA at the same time.
- (3) No inoperative aircraft or parts stored or maintained except inside a full enclosed building.
- (4) The Special Use Permit not be transferable to any future owner of the property.
- (5) The Board should require the Petitioner to have minimum liability insurance of \$5 million and a current certificate of insurance be on file at the Department of Planning and Zoning at all times.
- E. In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning.
- G. At the December 13, 2012, public hearing Mr. Larry Hall, adjacent landowner, testified. Mr. Larry Hall's testimony is summarized as follows:
 - (1) He prepared a large drawing for the Board to review during his testimony and submitted the drawing as a Document of Record.
 - (2) Based on his research and discussions with other pilots crosswinds could pose a risk to aircraft landing at the proposed RLA and would subsequently increase the risk that his family and property would incur, and he is concerned about the effect that any large crosswind from the south might have on an aircraft landing near his home.
 - (3) Based on his research and an article from *Sport Aviation Magazine* that he submitted as a Document of Record, an aircraft landing on a grass runway should not land if the grass is kept at more than 30% of the wheel height and 30% of the wheel height of the petitioners Cessna aircraft is 5.1 inches. If the grass will be

kept at 6 to 8 inches this will exceed 30% of the wheel height. If the petitioner intends to operate in a safe manner and maintain the grass runway at 5 inches the hay cannot be harvested which in turn would be taking this land out of agricultural production.

- (4) The trees in the 30,750 square feet area for the proposed hangar would have to be removed and the removal of these trees would destroy a substantial habitat and conservation environment.
- (5) Approximately 500 trees were planted on top of the berm that was constructed behind the existing adjacent homes.
- H. At the December 13, 2012, public hearing Dr. Phillip Jones, petitioner, testified. Dr. Jones' testimony is summarized as follows:
 - (1) He has planted over 2,500 native hardwood trees on his property therefore to indicate that he is creating a conservation problem is unfounded. The Petitioner reduced this number in testimony at the March 14, 2013, public hearing when he testified that he has planted 1,009 trees on his property.
 - (2) He has been flying over 20 years and has never had an incident of any kind and the argument regarding crosswinds is not an issue.
 - (3) Larry Hall's house is further away than almost all airport hangars to a landing strip and it is impossible to drive an airplane through the five feet of grass that is near Mr. Hall's property.
 - (4) An airplanes engine is on idle when it lands therefore his aircraft will be quieter than his diesel truck is when he drives down his lane. There may be a little noise when he takes off but he will be 1,000 feet in the air when he passes over Larry Hall's house.
 - (5) He has not made any movement in purchasing any additional property. The property adjacent to his is zoned CR and he would have to purchase 60 and an additional 80 acres which would require a substantial amount of money.
 - (6) His helicopter has one 315 horsepower engine the helicopter that generally lands at Carle Hospital has two 650 horsepower engines and comparing the noise it makes to the noise the helicopter that lands at Carle Hospital is like comparing a Nissan car to a semi-truck, and the noise is much less.

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Item 22. (continued)

- I. At the December 13, 2013, public hearing Mrs. Jean Fisher, neighbor, testified. Mrs. Fisher's testimony is summarized as follows:
 - (1) The Morton Arboretum website references native trees of the Midwest and describes the uses of such trees as food, shelter for wildlife and the advantages of trees in the landscape. Many of the common trees such as Sycamore, Oak, Maple, Basswood, Hickory Pines, and River birch grow to heights of 40 to 100 feet and are characterized as either fast or slow growing. Fast growing trees may average 25 inches per year, medium growing trees can average 13 to 22 inches per year, and slow growing trees may average less than 12 inches per year.
 - (2) Trees located along the river basin provide habitat for wildlife, stabilize ground, filter watershed, and improve water and air quality.
 - (3) If area homeowners decide to sell their property, especially Larry Hall, they would have to fully disclose that the property abuts an RLA and in her opinion that hurts property values and the proximity to an RLA could be a deal breaker for potential buyers.
- J. At the December 13, 2012, public hearing Mrs. Sarabeth Jones, petitioner, testified. Mrs. Jones' testimony is summarized as follows:
 - (1) She cannot believe that the cutting of the trees would cause more damage than what they have added to the property because they have enhanced the area by adding prairie and habitat areas for the different wildlife.
 - (2) She rides her horse on the entirety of the property and to her knowledge there are no Sycamore or Red Oak trees although they do have White Oak trees on the property.
- K. At the December 13, 2013, public hearing Linda Schumm, Bureau Chief Aviation Safety IDOT, testified that air traffic control will not tell a pilot to land in an RLA, but will tell the pilot that there is an RLA in the area because it is always safer to land on a runway than on a cornfield or road.
- L. A letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law enforcement property values may increase because of the greater community safety.
- M. A letter received December 13, 2012, from J.C. Crawford, nearby landowner, requested that his name be removed from the petition of opposition that was submitted at the August 11, 2011, public hearing.

REGARDING THE PURPOSE OF THE ZONING ORDINANCE

- 23. Regarding whether or not the proposed amendment will **[HELP ACHIEVE/NOT HELP**ACHIEVE] achieve the purpose of the Zoning Ordinance as established in Section 2 of the Ordinance for the following reasons:
 - A. Paragraph 2.0 (a) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to secure adequate light, pure air, and safety from fire and other dangers.

The proposed amendment-is not directly related to this purpose. [DOES/DOES NOT] secure adequate light, pure air, and safety from fire and other dangers for the following reasons:

- (1) This purpose is directly related to the limits on building coverage and the minimum yard requirements in the Ordinance and the proposed site plan is in full compliance with those requirements.
- (2) In a written statement read at the August 11, 2011, public hearing, neighbor Julia

 Hall (resident of the nearest dwelling to the RLA) stated she and her husband are
 opposed to the rezoning and:
 - i. Rezoning the property to allow for an RLA would prevent her from securing safety due to the possibility of an aircraft accident.
 - ii. She submitted accident information from the National Transportation

 Safety Board (NTSB) indicating there were 34 recorded single engine plane crashes in Illinois from 1/5/10 to 7/7/11.
 - iii. She submitted information from a 2009 publication of the *Helicopter Association International* indicating there were 161 civil helicopter accidents in 2009.
 - iv. The pond constructed by the Jones' attracts waterfowl which creates a distinct hazard to aircraft landing or taking off and according to data from the FAA there were 486 bird strikes by planes in Illinois in 2010.
- B. Paragraph 2.0 (b) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to conserve the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY.

Because of the proposed Special Use in related Case 688-S-11, the proposed amendment-is directly related to this purpose. [DOES/DOES NOT] conserve the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY for the following reasons:

(1) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and the rezoning would reduce the property values for homes in the area. Ms. Hall also submitted a letter from Daniel M. Cothern, Director of Commercial Real Estate for Keller Williams Realty, that stated in general that the RLA would have a negative impact on property value.

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Item 23.B. (continued)

- (2) At the August 15, 2011, public hearing, the Petitioner submitted a letter from Jackie Harbin of the Hillard Agency, Inc. Insurance & Real Estate Brokers of Villa Grove, Illinois, that stated in general that the runway should not affect property values of neighboring property and is summarized above under item 8.P.
- (3) A letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser at Craggs Appraisal Services, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law enforcement property values may increase because of the greater community safety.
- (4) The RLA is proposed to be 142.65 feet from the nearest dwelling.
- (5) The property is currently zoned CR and an RLA is not an authorized use in the CR District.
- (6) Refer to Item 8.Z. of the Summary of Evidence and Finding of Fact for related Case 688-S-11 for testimony regarding the existing berm, noise, and scenic quality.
- C. Paragraph 2.0 (c) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to lessen and avoid congestion in the public streets.
 - The proposed amendment is not directly related to this purpose.
- D. Paragraph 2.0 (d) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to lessen and avoid hazards to persons and damage to property resulting from the accumulation of runoff of storm or flood waters.
 - The proposed amendment is not directly related to this purpose. The requested Special Use Permit complies with the *Champaign County Stormwater Management Policy* and there are no special drainage problems that appear to be created by the Special Use Permit.
- E. Paragraph 2.0 (e) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to promote the public health, safety, comfort, morals, and general welfare.
 - The proposed amendment is directly related to this purpose because of the following:
 - (1) The property is currently zoned CR and an RLA is not an authorized use in the CR District.
 - (2) The RLA is proposed to be 142.65 feet from the nearest dwelling.

- (a) In regards to public safety, this purpose is similar to the purpose established in paragraph 2.0 (a) and is in harmony to the same degree.
- (b) In regards to public comfort and general welfare, this purpose is similar to the purpose of conserving property values established in paragraph 2.0 (b) and is in harmony to the same degree.
- (c) Overall, because of the proposed Special Use in related Case 688-S-11, the proposed amendment {DOES/DOES NOT} promote the public health, safety, comfort, morals, and general welfare.
- F. Paragraph 2.0 (f) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to regulate and limit the height and bulk of buildings and structures hereafter to be erected.

The proposed amendment is not directly related to this purpose.

This purpose is directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in full compliance.

- G. Paragraph 2.0 (g) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to establish, regulate, and limit the building or setback lines on or along any street, trafficway, drive or parkway.
 - The proposed amendment is not directly related to this purpose.

 This purpose is directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in full compliance.
- H. Paragraph 2.0 (h) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to regulate and limit the intensity of the use of lot areas, and regulating and determining the area of open spaces within and surrounding buildings and structures.

The proposed amendment is not directly related to this purpose.

This purpose is directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in full compliance.

I. Paragraph 2.0 (i) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to classify, regulate, and restrict the location of trades and industries and the location of buildings, structures, and land designed for specified industrial, residential, and other land uses.

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Item 23.I. (continued)

The proposed amendment is not directly related to this purpose. Harmony with this purpose requires that the special conditions of approval in the related Special Use Permit sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate noncompliant conditions. The Zoning Board of Appeals included any necessary special conditions in their final determination of Case 688-S-11.

- J. Paragraph 2.0 (j) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to divide the entire County into districts of such number, shape, area, and such different classes according to the use of land, buildings, and structures, intensity of the use of lot area, area of open spaces, and other classification as may be deemed best suited to carry out the purpose of the ordinance.
 - The proposed amendment is not directly related to this purpose. Harmony with this purpose requires that the special conditions of approval in the related Special Use Permit sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate noncompliant conditions. The Zoning Board of Appeals included any necessary special conditions in their final determination of Case 688-S-11.
- K. Paragraph 2.0 (k) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to fix regulations and standards to which buildings, structures, or uses therein shall conform.
 - The proposed amendment is not directly related to this purpose. Harmony with this purpose requires that the special conditions of approval in the related Special Use Permit sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate noncompliant conditions. The Zoning Board of Appeals included any necessary special conditions in their final determination of Case 688-S-11.
- L. Paragraph 2.0 (l) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to prohibit uses, buildings, or structures incompatible with the character of such districts.
 - The proposed amendment is not directly related to this purpose. Harmony with this purpose requires that the special conditions of approval in the related Special Use Permit sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate noncompliant conditions. The Zoning Board of Appeals included any necessary special conditions in their final determination of Case 688-S-11.

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- M. Paragraph 2.0 (m) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to prevent additions to and alteration or remodeling of existing buildings, structures, or uses in such a way as to avoid the restrictions and limitations lawfully imposed under this ordinance.
 - The proposed amendment is not directly related to this purpose.
- N. Paragraph 2.0 (n) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to protect the most productive agricultural lands from haphazard and unplanned intrusions of urban uses.
 - The proposed amendment is not directly related to this purpose.
- O. Paragraph 2.0 (o) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to protect natural features such as forested areas and watercourses.
 - Because of the proposed Special Use in related Case 688-S-11, the proposed amendment is directly related to this purpose because of the following: {DOES/DOES NOT} protect natural features such as forested areas and watercourses for the following reasons:
 - (1) The proposed hangar, if constructed would require some 26,903 square feet (.617 acre) in area of the wooded area on the subject property to be cut down.
 - (2) A portion of the CR District that is not currently wooded and is approximately 1.700 acres in area is proposed to remain in the CR District but is located at the west end of the proposed RLA and underneath the "Approach Area" required by IDOT. The slope of the Approach Area is 15 feet horizontal to one foot vertical and nothing is allowed to penetrate the imaginary plane of the Approach Area for a distance of 3,000 feet from the end of the RLA runway. Vegetation below the Approach Area must be maintained at a height such that it does not penetrate the Approach Area. The Approach Area is 17 18 feet above the runway on the east side of this area and approximately 43 46 feet above the runway on the west side. As indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13, the surface of the ground slopes down to the channel of the East Branch of the Embarrass River and the allowed clear height below the approach area will vary from 20 feet 20 feet to 49 approximately 50 feet.. It is unlikely that this area can ever have mature native trees so long as the IDOT Certificate is maintained for the proposed RLA.

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Item 23.O. (continued)

(3) A portion of the CR District that is currently wooded and is approximately 3.90 acres in area is located west of the proposed RLA and on the west side of the East Branch of the Embarrass River and this area will also be located underneath the IDOT required Approach Area. The ground elevations in this area are not indicated on the Plan And Profile Of Landing Area (revised site plan for the proposed RLA) received on 11/19/12 3/12/13 so the allowable clear height is not known with any accuracy.

However, the Approach Area varies in height from 43 46 feet above the runway on the east side of this wooded area to 67 85 feet in height above the runway on the west side. This land is not currently owned by the petitioner but in order to retain the IDOT Certificate for the proposed RLA the trees below the Approach Area cannot penetrate above the imaginary surface of the Approach Area and therefore trees cannot be taller than the Approach Area.

- (4) The Petitioner testified at the August 11, 2011, public hearing that the trees will not be damaged, touched, or violated in any way during the use of the proposed RLA.
- (5) In a written statement read at the August 11, 2011, public hearing, neighbor Julia Hall (resident of the nearest dwelling to the RLA) stated she and her husband are opposed to the rezoning and the rezoning would not protect the forested area.
- (6) At the December 13, 2012, public hearing, nearby landowner Jean Fisher, testified that trees along the river basin provide habitat for wildlife, stabilize ground, filter watershed, and improve water and air quality.
- At the December 13, 2012, public hearing Mrs. Sarabeth Jones, petitioner, testified that she cannot believe that the cutting of the trees would cause more damage than what they have added to the property because they have enhanced the area by adding prairie and habitat areas for the different wildlife.
- P. Paragraph 2.0 (p) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to encourage the compact development of urban areas to minimize the cost of development of public utilities and public transportation facilities.

The proposed amendment is not directly related to this purpose.

Q. Paragraph 2.0 (q) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to encourage the preservation of agricultural belts surrounding urban areas, to retain the agricultural nature of the County, and the individual character of existing communities.

The proposed amendment is not directly related to this purpose.

R. Paragraph 2.0 (r) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to provide for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

The proposed amendment is not directly related to this purpose.

REGARDING SPECIAL CONDITIONS OF APPROVAL

No special conditions are proposed for the rezoning case

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SUMMARY FINDING OF FACT

From the documents of record and the testimony and exhibits received at the public hearing conducted on June 16, 2011, August 11, 2011, November 10, 2011, May 31, 2012, August 16, 2012, December 13, 2012, March 14, 2013, and April 25, 2013, the Zoning Board of Appeals of Champaign County finds that:

- 1. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} the Land Resource Management Plan because of the following (objectives and policies are very briefly summarized):
 - A. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF } Goal 4 Agriculture because of the following:
 - It will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF }
 Objective 4.1 requiring minimization of the fragmentation of farmland, conservation of farmland, and stringent development standards on best prime farmland because the only relevant policies are the following:
 - It will *HELP ACHIEVE* Policy 4.1.1 requiring that other land uses only be accommodated under very restricted conditions or in areas of less productive soils (see Item 14.A.(2)).
 - It {DOES/DOES NOT} conform to Policy 4.1.6 requiring that the use, design, site and location are consistent with policies regarding suitability, adequacy of infrastructure and public services, conflict with agriculture, conversion of farmland, and disturbance of natural areas (see Item 14.A.(3)).
 - It will *HELP ACHIEVE* Objective **4.2 requiring discretionary development to not interfere with agriculture** because it will *HELP ACHIEVE* all of the subsidiary policies under 4.2.
 - It will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF }
 Objective 4.3 requiring any discretionary development to be on a suitable site because it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF} the following:
 - It will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVEMENT OF }
 Policy 4.3.1 requiring on other than best prime farmland that County may authorize a discretionary review development if the site is suited overall (see Item 14.C.(1)).

And will HELP ACHIEVE the following:

- Policy 4.3.3 requiring existing public services be adequate to support the proposed development effectively and safely without undue public expense (see Item 14.C.(3)).
- Policy 4.3.4 requiring existing public infrastructure be adequate to support the proposed development effectively and safely without undue public expense (see Item 14.C.(4)).

- B. The proposed amendment will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT ACHIEVE / PREVENT Goal 8 Natural Resources because while it will either not impede or is not relevant to the other Objectives and Policies under this goal, it will {HELP ACHIEVE / NOT HELP ACHIEVE / PREVENT A
 - Objective 8.5 requiring the County to encourage the maintenance and enhancement of aquatic and riparian habitats because while it will either not impede or is not relevant to the other Objectives and Policies under this goal it, will {HELP ACHIEVE / NOT HELP ACHIEVE/PREVENT ACHIEVEMENT OF} the following:
 - Policy 8.5.1 requiring discretionary development to preserve existing habitat, enhance degraded habitat and restore habitat (see Item 18.A.(2)).
 - Policy 8.5.2 requiring discretionary development to cause no more than minimal disturbance to the stream corridor environment (see Item 18.A.(3)).
 - Objective 8.6 that avoids loss or degradation of habitat because it will {HELP ACHIEVE / NOT HELP ACHIEVE/PREVENT ACHIEVEMENT OF} the following:
 - Policy 8.6.2 requiring new development to minimize the disturbance of habitat or to mitigate unavoidable disturbance of habitat (see Item 18.B.(2)).

And will HELP ACHIEVE the following:

- Policy 8.6.3 requiring the County to use credible sources of information to identify priority areas for protection, restoration, preservation or enhancement (see Item 18.B.(3)).
- Policy 8.6.4 requiring implementation of IDNR recommendations for discretionary development sites that contain endangered or threatened species (see Item 18.B.(4)).
- C. The proposed amendment will **NOT IMPEDE** the following LRMP goal(s):
 - Goal 6 Public Health and Safety
 - Goal 7 Transportation
 - Goal 10 Cultural Amenities
- D. The proposed amendment is **NOT RELEVANT** to the following LRMP goal(s):
 - Goal 1 Planning and Public Involvement
 - Goal 2 Governmental Coordination
 - Goal 3 Prosperity
 - Goal 5 Urban Land Use
 - Goal 9 Energy Conservation

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- 2. The proposed Zoning Ordinance map amendment {IS / IS NOT} consistent with the LaSalle and Sinclair factors because of the following:
 - There have been conflicting reports on the effect of neighboring property values and no formal study has been conducted regarding property values.
 - The proposed use could not be established without the proposed map amendment.
 - The subject property is **SUITABLE** for the current zoned uses and is **SUITABLE**/**NOT SUITABLE**} for the proposed Special Use Permit.
 - The proposed map amendment, on the basis of the proposed Special Use Permit, is {COMPATIBLE/INCOMPATIBLE} with the existing uses and zoning of nearby property.
 - There {IS/ IS NOT} a need and demand for the use.
 - The proposed use {CONFORMS/ DOES NOT CONFORM} to the Champaign County Land Resource Management Plan.
- 3. The proposed Zoning Ordinance map amendment will {HELP ACHIEVE / PREVENT ACHIEVEMENT OF} the purpose of the Zoning Ordinance because:
 - The proposed map amendment is either fully consistent with or will not impede the achievement of 10 of the 18 Purpose statements.
 - The proposed map amendment {DOES/DOES NOT} secure adequate light, pure air, and safety from fire and other dangers (Purpose 2.0 (a) see Item 23.A.).
 - The proposed map amendment {DOES/DOES NOT} conserve the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY (Purpose 2.0 (b) see Item 23.B.).
 - The proposed map amendment {DOES/DOES NOT} promote the public health, safety, comfort, morals, and general welfare (Purpose 2.0 (e) see Item 23.E.).
 - The proposed map amendment {DOES/DOES NOT} protect natural features such as forested areas and watercourses (Purpose 2.0 (o) see Item 23.O.).
 - The proposed map amendment {DOES/DOES NOT} do the following:
 - it adequately restricts the location of trades and industries and the location of BUILDINGS, STRUCTURES, and land designed for specified land USES; and
 - it is consistent with the existing division of the COUNTY into DISTRICTS and different classes according to the USE of land, BUILDINGS, and STRUCTURES, intensity of the USE of LOT AREA, and other classification as may be deemed best suited to carry out the purpose of the ordinance; and
 - it is consistent with the regulations and standards to which BUILDINGS, STRUCTURES, or USES therein shall conform; and

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- it is consistent in its prohibition on USES, BUILDINGS, OR STRUCTURES incompatible with the character of such DISTRICT. (Purposes 2.0 (i) (j.) (k) and (l); see Items 23.I., J., K. and L).
- 4. Regarding the error in the present Ordinance that is to be corrected by the proposed change:
- A. The land proposed to be rezoned is currently in agricultural use and has been since b

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DOCUMENTS OF RECORD

- 1. Petition for Zoning Map Amendment signed by Philip W. and Sarabeth F. Jones received on April 29, 2011, with attachments:
 - A List of property owners adjacent to or within 250 feet
 - B United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
 - C Sketch of land parcels adjacent or within 250 feet
 - D Land Parcel Description prepared by F. Wayne Ward
 - E Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - F Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109213 dated March 1, 2011
 - G Illinois Department of Natural Resources Eco CAT Natural Resource Review Results for Project Number 1109346 dated 3/02/2011
 - H Plat "B" Prepared for Ed Gire Ground Elevation Survey Proposed Building Site prepared by F. Wayne Ward dated January 14, 2004
 - I Topographic Survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010
 - J Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - K Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109346 dated March 3, 2011
 - Cover Letter to Illinois Historic Preservation Evaluation prepared by Alan R. Singleton Law Firm received April 29, 2011
 - M Letter from Anne E. Haaker Deputy State Historic Preservation Officer dated April 2, 2011
 - N Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011
 - O Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
 - P Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23, 2010
- 2. Special Use Permit Application signed by Philip W. and Sarabeth F. Jones received on April 29, 2011, with attachments:
 - A List of property owners adjacent to or within 250 feet
 - B United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
 - C Sketch of land parcels adjacent or within 250 feet
 - D Land Parcel Description prepared by F. Wayne Ward
 - E Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - F Proposed RLA site plan, $8\frac{1}{2}$ x 11 inches (not to scale)
 - G Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - H Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011

- I Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
- J Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23,2010
- K Color copies of Phillip Jones Airstrip Soils Map by the Champaign County Soil and Water Conservation District received April 29, 2011
- Color copies of United States Geological Survey (USGS) aerial photograph of Villa Grove NW Quadrangle annotated to indicate subject property
- 3. Preliminary Memorandum for Case 687-AM-11 dated June 10, 2011, with attachments:
 - A Case Maps for Cases 687-AM-11 & 688-S-11 (Location, Land Use, Zoning)
 - B Land Parcel Description prepared by F. Wayne Ward
 - C Letter from Rick Petruszka of Illinois Department of Natural Resources Division of Ecosystems and Environment for Project Number 1109346 dated March 3, 2011
 - D Illinois Department of Natural Resources Eco CAT Natural Resource Review Results for Project Number 1109346 dated 3/02/2011
 - E Cover Letter to Illinois Historic Preservation Evaluation prepared by Alan R. Singleton Law Firm received April 29, 2011
 - F Letter from Anne E. Haaker Deputy State Historic Preservation Officer dated April 2, 2011
 - G Preliminary Finding of Fact for Case 687-AM-11
- 4. Preliminary Memorandum for related Case 688-S-11 dated June 10, 2011, with attachments:
 - A Zoning Case Maps for Cases 687-AM-11 & 688-S-11 (Location, Land Use, Zoning)
 - B Natural Resource Report from Champaign County Soil and Water Conservation District received April 29, 2011
 - C Excerpt of Flood Insurance Rate Map (FIRM) Community Panel Number 170894 0275 B dated March 1, 1984
 - D Excerpt of Embarras River Watershed Digital Floodplain Mapping, Champaign County, Illinois. Illinois State Water Survey. August 2002.
 - E Proposed RLA site plan, 8½ x 11 inches (not to scale)
 - F Proposed RLA site plan, 11 x 17 inch grid paper (at 1 inch equals 200 feet)
 - G Plat "B" Prepared for Ed Gire Ground Elevation Survey Proposed Building Site prepared by F. Wayne Ward dated January 14, 2004
 - H Topographic Survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010
 - I Excerpts of Illinois Aviation Safety Rules (92 Ill. Admin. Code Part 14)
 - J Jones RLA Imaginary Surfaces (staff illustration)
 - K Letter of Support from Champaign County Sheriff Dan Walsh dated February 11, 2011
 - L Letter of Support from Champaign County Emergency Management Agency Director Bill Keller dated November 22, 2010
 - M Letter of Support from Douglas County Sheriff Charlie McGrew dated November 23,2010
 - N Preliminary Draft Summary of Evidence for Case 688-S-11
- 5. Supplemental Memorandum for related Case 687-AM-11 dated June 16, 2011, with attachments:
 - A Draft 1973 Land Cover for Subject Property and Vicinity

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- B Stream Related Soils for Subject Property and Vicinity
- C Topography for Subject property and Vicinity
- D Area Below Base Flood Elevation for Subject Property and Vicinity
- E Draft Composite sketch Map of CR District Suitability for Subject Property and Vicinity
- F Draft Sketch Map of Areas Most Suitable for CR District for Subject Property and Vicinity
- G Best Prime Farmland Soils for Subject Property and Vicinity
- 6. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 5, 2011, with attachments:
 - A Draft Minutes of June 16, 2011, public hearing (included separately)
 - B Photographs submitted by Jean Fisher at the public hearing on June 16, 2011
 - C Photographs submitted by Julia Wright Hall at the public hearing on June 16, 2011
 - D Photographs submitted by Jean Fisher on July 5, 2011
 - E Written material submitted by Jean Fisher on July 11, 2011
 - F Letter to Zoning Board of Appeals submitted by Larry Hall on August 1, 2011
 - G Letter to Zoning Board of Appeals submitted by Julia Wright Hall on August 1, 2011, with attachments:
 - (1) Database information of single engine aircraft accidents in Illinois from 01/10 to 7/31/11
 - (2) Five Year Comparative U.S. Civil Helicopter Safety Trends
 - (3) FAA National Wildlife Strike Database Query Results
 - (4) Switchboard article
 - (5) EPA Regulatory Announcements
 - (6) Photograph of property
 - (7) Photograph of berm vegetation
 - (8) Letter from Daniel M. Cothern, Keller Williams Real Estate
 - H 6/21/11 Staff Mark Up of Proposed Site Plan
- 7. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 11, 2011, with attachments:
 - A Cover Letter and Revised Site Plan received August 11, 2011
 - B Email and cover letter date August 11, 2011, from Alan Singleton with attachments:
 - (1) Noise levels and property value summary
 - (2) Safety summary
 - (3) Letter dated August 10, 2011, in support of Cases 687-AM-11 and 688-S-11 from Ben Shadwick (petitioner in related Case 690-S-11)
 - (4) Letter in support of Phillip and Sara Jones from Chuck and Shelley Sollers (petitioners in related Case 689-S-11)
 - (5) Letter dated August 9, 2011, in support of Cases 687-AM-11 and 688-S-11 from neighbor Carl Brown
 - (6) Webpage from the Experimental Aircraft Association (EAA) regarding aviation fuels and auto fuel STC information
 - (7) Animal Outfitters web pages

- (8) Photograph of Fisher property
- C Email dated August 9, 2011, from penny Castillo to Jean Fisher
- D Webpage from the Illinois Department of Agriculture Entitled Agrichemical Facilities Containment Program
- E Effects of Jet Engine Noise on Hearing Thresholds. Pakistan Journal of Otolarynology. Vol. 2010. (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- F Web page from eHow.com entitled *Harmful Effects of Jet Engine Noise* (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- G Effects of Aircraft Noise and Sonic Booms On Domestic Animals and Wildlife: A Literature Synthesis. Engineering and Services Center, U.S. Air Force and Fish and Wildlife Services, U.S. Department of the Interior. June 1988. (not attached but distributed for review by the ZBA at the August 11, 2011, meeting)
- 8. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 15, 2011, with attachments:
 - A Cover letter dated August 11, 2011, from Alan Singleton with attachments:
 - (1) Sec. 160.160 of the Illinois Administrative Code
 - (2) Appendix A to Section 16 of the Illinois Administrative Code
 - B Letter dated August 11, 2011, from Jackie Harbin of the Hillard Agency, Inc.
 - C Letter of concern dated August 9, 2011, from Stephen R. Gast
 - D Petition of opposition to the proposed rezoning submitted by Larry Hall
 - E Diagram illustrating the slope of the berm on the Jones property submitted by Larry Hall
 - F Email from Jean Fisher received on August 12, 2011
- 9. Letter of support from Jud Nogle received August 26, 2011
- 10. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated November 10, 2011
- 11. Revised Site Plan received December 14, 2011
- 12. Revised Site Plan received December 16, 2011
- 13. Letter from Linda K. Schumm, IDOT-Division of Aeronautics, received February 27, 2012
- 14. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated May 23, 2012 with attachment:
 - A Excerpt from Special Use Permit Application received April 29, 2011
- 15. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated August 10, 2012
- *16. Email from Alan Singleton to Andrew Kass sent at 4:34PM Friday, November 9, 2012, with attached copy of letter dated March 30, 2012, from John Hall

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- 17. Plan and Profile of Landing Area received November 9, 2012
- 18. Cover Letter from F. Wayne Ward, P.E., received November 14, 2012, with attachments:
 - A Revised Legal Description
 - B Revised Plan and Profile of Landing Area
- 19. Revised Plan and Profile of Landing Area_received November 19, 2012
- 20. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated December 6, 2012, with attachments:
 - A Revised Plan and Profile of Landing Area received November 19, 2012
 - B Proximity to Nearest Dwelling (included separately)
 - C Excerpts from the Kane County, Illinois Zoning Ordinance
 - D Goals, Objectives, and Policies excerpted from the Champaign County Land Resource Management Plan (included separately)
 - E 12/6/12 Revised Draft Summary of Evidence for Case 688-S-11 (included separately)
 - F 12/6/12 Revised Finding of Fact for Case 687-AM-11 (included separately)
- 21. Cover Letter from Alan Singleton received December 13, 2012, with attachments:
 - A Letter from J.C. Crawford
 - B Letter from Jongin Kim Craggs
 - C Letter from Linda K. Schumm, IDOT-Division of Aeronautics, dated February 24, 2012
 - D Applicable Case Law Summary
 - E Wright v. County of Winnebago Case Summary
 - F County of Lake v. First National Bank of Lake Forest Case Summary
 - G Jones RLA Special Conditions
 - H RLAs in and around Champaign County (various maps and images)
 - I News-Gazette article dated August 31, 2011
 - J News-Gazette article dated October 26, 2011
- 22. Sport Aviation Magazine article from the July 2010 issue titled "Grass Landing" written by Bob O'Quinn, submitted by Larry Hall at the December 13, 2012, public, hearing
- 23. Diagram and photo submitted by Larry Hall at the December 13, 2012, public hearing
- 23. "Native Trees of the Midwest" article from the Morton Arboretum website submitted by Jean Fisher at the December 13, 2012, public hearing
- 24. IDOT Aviation Safety Rules guidebook submitted by Linda Schumm at the December 13, 2012, public hearing

- 25. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated March 8, 2013, with attachments:
 - A AS APPROVED minutes for Cases 687-AM-11 and 688-S-11 excerpted from the minutes of the December 13, 2012, public hearing
 - B Handout from Petitioner's Attorney Alan Singleton received at the December 13, 2012, public hearing; indicated on ZBA website (included only for the Board but available upon request and on the ZBA website for 12/13/12 meeting as "687-AM-11 & 688-S-11 Handout")
 - C Plan and Profile Of Landing Area Annotated To Illustrate Proposed Separations
 - D Proximity to Runway Aero-Place Subdivision
 - E Plan and Profile Of Landing Area Annotated To Illustrate Likely Impacts To CR District Habitat
 - F Excerpts including Sheet 82 of 85 and pps. 137-138 and Table 11from the *Soil Survey of Champaign County, Illinois*. United States Department of Agriculture Natural Resources Conservation Service. 2003.
 - F pp. 8,9, 54, 55 from Field Guide to Native Oak Species of Eastern North America, Stein, John and Denise Binion and Robert Acciavatti. USDA Forest Service. January 2003
 - G Native Trees of the Midwest from the Morton Arboretum located in Lisle, Illinois
 - H Sport Aviation Magazine article from the July 2010 issue titled "Grass Landing" written by Bob O'Quinn, submitted by Larry Hall at the December 13, 2012, public, hearing
 - 26. Letter from Anne Haaker, Illinois State Historic Preservation Agency, to Andy Kass, Associate Planner, received March 11, 2013
- 27. Letter dated March 11, 2013, from the Petitioner's Attorney Alan Singleton received March 12, 2013, with attachments:
 - A Revised Site Plan (Plan Profile)
 - B Letter from Arborist Greg Durst
 - C News-Gazette Article from January 22, 2013, "Van Hits Residence, Overturns"
- 28. NRCS Codes 645 and 647
- 29. Supplemental Memorandum for Cases 687-AM-11 and 688-S-11 dated March 14, 2013, with attachments:
 - A <u>Letter dated March 11, 2013, from the Petitioner's Attorney Alan Singleton received</u>

 March 12, 2013, with attachments:
 - (1) Revised Site Plan (Plan Profile)
 - (2) Letter from Arborist Greg Durst
 - (3) News-Gazette Article from January 22, 2013, "Van Hits Residence, Overturns"
 - B Plan and Profile of Landing Area (Revised 3/12/13) Annotated to Illustrate Proposed Separations
 - C Survey Exhibit for Dr. Phillip Jones received August 19, 2009, from Koehler Professional Engineers & Land Surveyors

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- D Letter received March 11, 2013, from Illinois Historic Preservation Agency
- E Additional Evidence Related to Suitability and Injury to the District
- F Summary Finding of Fact for Case 687-AM-11
- G Item 23 addition to Case 687-AM-11 Finding of Fact and Final Determination
- 30. Handout from Petitioner's Attorney Alan Singleton received at the March 14, 2013, public hearing, with attachments:
 - A Summary of new site plan shifting RLA 36 feet further south of Larry Hall home
 - B New site plan shifting 36 feet south
 - C Traffic counts on Route 130 (1.2 million) compared to RLA
 - D Local newspaper article summarizing van striking a residence
 - E Picture of exhibits shown at hearing relative weights of Jones aircraft (less than 4000 pounds) to a 80,000 pound semi that legally travel Route 130
 - F Map showing that the center of Route 130 is closer to Hall home than the center of the runway extended (170 feet vs. 203 feet)
 - Map showing that the Hall home is closer to the zoning setback from the highway than it is to the runway safety area (85 feet vs. 143 feet)
 - H Letter from arborist providing that the trees at the west end of the RLA will not grow further and the RLA will not harm the forest
 - I Summary of the possible positive effect of moving the RLA to the south 36 feet in terms of vegetation
 - J Memo addressing the article on grass height that Larry Hall submitted from the United Kingdom
 - K Proposed special condition that Petitioners adopt a land management plan, as well as information on the possible plan
 - L Memo on spot zoning property is contiguous to AG-1 and proposed rezoning would not be spot zoning
 - M Picture of some of the seedlings planted by petitioner on their homestead
 - N Map showing a total of 1,009 trees that have been recently planted on petitioners property
 - O Summary and documentation of the 31.8 acres Dr. Jones has in conservation programs
- 31. Tree information, emails, and aircraft details submitted by Julian Wright-Hall at the March 14, 2013, public hearing
- 32. Assessor information, news article, and photographs submitted by Jean Fisher at the March 14, 2013, public hearing
- 33. Letter, notes, grass landing article, photographs, and Illustrations A and G-2 from the Illinois
 Administrative Code submitted by Larry Hall at the March 14, 2013, public hearing
- 34. Large illustrative photograph submitted by March Fisher at the March 14, 2013, public hearing
- 35. Large illustrative photograph submitted by Jean Fisher at the March 14, 2013, public hearing

- 36. Large folder submitted by the petitioners Attorney at the March 14, 2013, public hearing with the following documents:
 - A Bell OH-58 Kiowa Helicopter Wikipedia Article. www.wikipedia.org.
 - <u>B</u> <u>Bell OH-58 Kiowa description from Aviation Enthusiast Corner. www.aero-web.org.</u>
 - <u>C</u> Aircraft Performance Data for Cessna 210F Centurion '66. www.whattofly.com.
 - D Cessna 210 Wikipedia Article. www.wikipedia.org.
 - E Excerpts from Commercial Driver's Study Guide (pages 9 and 10).
 - F Noise Level & Property Value Summary (see Attachment B(1) of the August 11, 2011, Supplemental Memo for Cases 687-11-AM & 688-S-11)
 - G Safety Summary (see Attachment B(2) of the August 11, 2011, Supplemental Memo for Cases 687-11-AM & 688-S-11)
 - H Annual Review of U.S. General Aviation Accident Data, 2005. National Transportation

 Safety Board.
 - Annual Review of U.S. General Aviation Accident Data, 2004. National Transportation
 Safety Board.
 - J Annual Review of U.S. General Aviation Accident Data, 2003. National Transportation
 Safety Board.
 - <u>K</u> 2009 County Summary of Crash Reports, Report No: SDM-ERC113. *Illinois Department*of Transportation.
 - L Advisory Circular No: 93-2, Appendix I and II, Federal Aviation Administration
 - M Advisory Circular No: 36-3H, Appendix 1 and 2, Federal Aviation Administration
 - N Hearing Loss Protection for Agricultural Workers. Texas Cooperative Extension, *The Texas A&M University System*.
 - O Decibel Levels of Common Sounds article from home.earthlink.net
 - P Understanding Sound and Noise from quietrock.com
 - O Decibel (Loudness) Comparison Chart from gcaudio.com
 - R Darren Mildoon, The Impact of Airport Noise on Residential Property Values: A Case
 Study of the Portland-Hillsboro Airport, June 2003.
 - <u>S</u> Daniel P. McMillen, Airport Expansions and Property Values: the Case of Chicago O'Hare
 Airport. Journal of Urban Economics, October 15, 2003.
 - T Community Tool. Noisequest from noisequest.psu.edu
 - U Alexandra Lazic & Richard Golaszeweski, A Technical Note on Aircraft Noise and Its

 Cost to Society. GRA, Incorporated.
 - V Car Crashes into House. The News-Gazette, October 21, 2010.
 - W Car Crashes into St. Causes Gas Leak, Kane County Chronicle, May 31, 2011.
 - X Illinois Car Accident 15 Year Old Crashes Vehicle into House, Later Cleared of Wrongful Death. Chicago Personal Injury Lawyer Blog.

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- Y Airport Noise, Safety, and Airport Land Use Planning. Aircraft owners and Pilots Association from www.aopa.org.
- Christa L. Coppola, Noise in the Animal Shelter Environment: Building Design and the
 Effects of Daily Noise Exposure. Journal of Applied Animal Welfare Science.
- 37. Property Management Plan received March 22, 2013, from Bruce Stikkers, Champaign County SWCD, with attachments:
 - A NRCS Code 645
 - B NRCS Code 647
 - C NRCS Code 338
 - D NRCS Code 666
- 38. Letter from Larry Hall & Julia Wright-Hall received April 15, 2013, with attachments
- 39. Supplemental Memorandum for Cases 687-AM-11 & 688-S-11 dated April 17, 2013 with attachments:
 - A Letter submitted by Larry Hall at March 14, 2013 public hearing
 - B Emails & tree information submitted by Julia Wright-Hall at the March 14, 2013, public hearing (included separately)
 - C Letter from Larry Hall & Julia Wright-Hall received April 15, 2013, with attachments (included separately; full attachments only included for ZBA members but are available on website)
 - D Phil Jones Property Management Plan received March 22, 2013 (included separately)
 - E Site map of trees planted by Jones Family received March 14, 2013(included separately)
 - F Plan And Profile Of Landing Area (Revised Site Plan) received March 12, 2012
 - G Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Proposed Separations
 - H Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Likely Impacts To CR District Habitat
 - Illustration of extent of Affected Woodlands under the Western Approach Area. Annotated Excerpt from the Soil Survey of Champaign County, Illinois. United States Department of Agriculture Natural Resources Conservation Service. 2003.
 - J Likely Impacts Of Proposed Special Use Permit On The Scenic And Natural Areas In The CR District
 - K Revised Plan And Profile Of Landing Area received March 12, 2012, Annotated To Illustrate Areas Proposed for Rezoning That Are Best Suited For CR District
 - L Revised Draft Summary of Evidence for Case 688-S-11 (included separately)
 - M Revised Draft Finding of Fact for Case 687-AM-11 (included separately)
 - N Draft minutes for Cases 687-AM-11 and 688-S-11 for the March 14, 2013, public hearing (included separately)

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FINAL DETERMINATION

Pursuant to the authority granted by Section 9.2 of the Champaign County Zoning Ordinance, the Zoning Board of Appeals of Champaign County determines that:

The Zoning Ordinance Amendment requested in Case 687-AM-11 should {BE ENACTED / NOT BE ENACTED} by the County Board in the form attached hereto.

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:

Eric Thorsland, Chair Champaign County Zoning Board of Appeals

ATTEST:

Secretary to the Zoning Board of Appeals

Date

1 **EXCERPT OF** 2 **DRAFT MARCH 14, 2013, MINUTES FOR CASES 687-AM-11 AND 688-S-11** 3 4 5. **Continued Public Hearing** 5 6 Case 687-AM-11 Petitioner: Phillip W. and Sarabeth F. Jones Request to amend the Zoning Map to 7 change the zoning district designation from CR Conservation Recreation to AG-1 Agriculture. 8 Location: An approximately 14 acre tract of land that is located in the North Half of the South Half 9 of the Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois Route 130 (CR1600E) and 1,328 feet south of the intersection of Illinois Route 130 and CR 10 200N and County Highway 16 and commonly known as the property at 175N CR 1600E, Villa 11 12 Grove. 13 14 Case 688-S-11 Petitioner: Phillip W. and Sarabeth F. Jones Request to authorize the construction 15 and use of a "Restricted Landing Area" for use by airplanes consistent with Illinois Department of Transportation regulations and helicopter use for public safety assistance as needed and with 16 17 limited helicopter use for personal use, as a Special Use on land that is proposed to be rezoned to the AG-1 Agriculture Zoning District from the current CR Conservation Recreation Zoning 18 District in related zoning case 687-AM-11; and with a waiver of a Special Use standard condition 19 required by Section 6.1 that requires compliance with Footnote 11 of Section 5.3. Location: An 20 21 approximately 14 acre tract of land that is located in the North Half of the South Half of the 22 Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois 23 Route 130 (CR1600E) and 1,328 feet south of the intersection of Illinois Route 130 and CR 200N and County Highway 16 and commonly known as the property at 175N CR 1600E, Villa Grove. 24 25 26 Mr. Thorsland called Cases 687-AM-11 and 688-S-11 concurrently. 27 28 Mr. Thorsland informed the audience that Case 688-S-11 is an Administrative Case and as such the 29 County allows anyone the opportunity to cross examine any witness. He said that at the proper time he 30 will ask for a show of hands for those who would like to cross examine and each person will be called upon. He requested that anyone called to cross examine go to the cross examination microphone to ask 31 32 any questions. He said that those who desire to cross examine are not required to sign the witness register 33 but are requested to clearly state their name before asking any questions. He noted that no new testimony

is to be given during the cross examination. He said that attorneys who have complied with Article 7.6 of

the ZBA By-Laws are exempt from cross examination.

1	Mr. Thorsland informed the audience that anyone wishing to testify for any public hearing tonight must
2	sign the witness register for that public hearing. He reminded the audience that when they sign the
3	witness register they are signing an oath.
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5 6	Mr. Thorsland asked the petitioners if they or their representative desired to make a statement outlining the nature of their request.
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8 9 10 11	Mr. Alan Singleton, attorney for the petitioners, distributed an informational packet dated March 14, 2013, to the Board and staff for review. He said that he will provide a summary of the distributed packet but he would also like to address some of the concerns that were raised during the last public hearing for these cases.
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13 14 15	Mr. Singleton stated that at the last public hearing the Board requested additional information regarding conservation on the subject property and voiced their concerns about the proximity of the proposed location to Mr. Larry Hall's home.
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17 18 19 20 21	Mr. Singleton stated that in order to keep things in perspective, according to I.D.O.T. data there are 1.2 million vehicle passes on Route 130 versus a few plane passes on the proposed restricted landing area. He said that 80,000 pounds is the maximum weight that a semi-truck and trailer can have on U.S. Route 130 and Dr. Jones' aircraft weighs less than 4,000 pounds. He said that the frequency and relative weight of the vehicles that passes by Mr. Larry Hall's home is greater than the maximum weight of Dr. Jones' aircraft.
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24 25 26 27 28 29 30 31 32	Mr. Singleton stated that this has been a very long, drawn-out case for everyone involved therefore he would like to address everyone's concerns. He said that he attempted to be very thorough and organized with the materials that he presented tonight and he apologizes for not having this information to staff and the Board sooner. He said that Tab #1 is a summary of the new site plan shifting the RLA 36 feet further south of Larry Hall's home. He said that the side transition is already located on the land owned by Bragg Farms therefore a little bit more was shifted onto that property and Dr. Jones can testify that he spoke with Mr. Bragg and Mr. Bragg indicated that he was agreeable to the shift. Mr. Singleton stated that 36 feet is the maximum amount that the RLA can be shifted south without requiring that Dr. Jones purchase additional farmland.

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Mr. Singleton stated that Tab #2 is the new site plan indicating the 36 foot shift of the RLA to the south. He said that the angle of the trees at the west helps with any conservation concerns that the Board may have. He said that Tab #3 includes traffic counts on Route 130 compared to the RLA. He said that Dr. Jones will be completing a total of 126 passes, landings and take-offs, per year and I.D.O.T. data indicates that there are 1.2 million vehicle passes per year on Route 130 and 80,300 of those passes are by trucks. He said that Tab #4 is a January 22, 2013, article from the *News Gazette* regarding a van hitting a residence and then overturning. He said that Tab #5 is a photograph indicating an example of the relative weights of Dr. Jones' aircraft in comparison to a semi that can legally be driven on Route 130. He said that he did not make copies of the underlying documents for this comparison for everyone but he would submit the documents for the record. He said that included in the submitted documentation are the weights of Dr. Jones' aircraft.

Mr. Singleton stated that Tab #6 is a map indicating that the center of Route 130 is closer to the Larry Hall's home than the center of the runway extended. He said that it is 203 feet from the centerline of the proposed RLA to the south edge of Larry Hall's home compared to 170 feet from the centerline of Route 130 to the east edge Larry Hall's home. He said that by the time that the airplane arrives to the runway safety area the aircraft will be 1,000 feet in the air therefore 1,203 feet could be indicated in lieu of 203 feet, although he did not indicate such.

Mr. Singleton stated that Tab #7 is a map indicating that the Larry Hall home is closer to the zoning setback from the highway than it is to the runway safety area. He said that it is 143 feet from the north edge of the runway safety area to the south edge of Larry Hall's home compared to 85 feet from the front yard setback, as required by the Zoning Ordinance, to the east edge of Larry Hall's home. He said that when you think about associated risks he would not believe that someone would want to play catch or have a picnic along the shoulder of the highway with your children or grandchildren because cars could veer off the pavement and at times the highway is very noisy. He said that the runway safety area is I.D.O.T.'s setback and to add anything over and beyond what I.D.O.T. has indicated for safety is unwarranted. He said that the petitioners would like to mitigate any effects on Mr. and Mrs. Hall and the other neighbors.

Mr. Singleton stated that Tab #8 is a letter from an arborist providing that the trees at the west end of the RLA will not grow further and the RLA will not harm the forest. He said that the arborist personally examined the property and the trees located at the west end of the runway and determined that it is unlikely that the trees will grow taller in height therefore it is unlikely that any trimming of the trees will be necessary. He said that Tab #9 is a summary of the possible positive effect of moving the RLA to the

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south 36 feet in terms of vegetation and this information has already been discussed. He said that Tab #10 is a memorandum addressing the article on grass height that Larry Hall submitted at the December 13, 2012, meeting, from the United Kingdom Civil Aviation Authority. He said that the United Kingdom Civil Aviation Authority is not a governing body in the United States. He said that Dr. Jones intends to maintain the grass runway in adherence with the recommendations of the safety brochure put out by the Civil Aviation Authority, which suggests a height no more than 30 percent of the wheel. He said that the safety recommendation pertains only to the height of the grass on the runway therefore the side area around the runway itself, side transitions, are not the subject of the grass height recommendations and therefore will be able to provide additional area for agricultural use, hay production.

Mr. Singleton stated that Tab #11 addresses the requirement that the petitioners adopt a land management plan. He said that the process for a land management plan has been started although it has not been completed to date. He said that the petitioners are proposing that a special condition be added requiring the land management plan. He said that Mr. John Hall recommended that the petitioner contact Bruce Stikkers, Resource Conservationist, Champaign County Soil and Water Conservation District, and they did although Mr. Stikkers was unable to complete the entire plan because he had some personal issues that required him to be out of town. Mr. Singleton stated that the standards for establishment of a land management plan are set forth in Mr. Stikkers e-mail, which is included in Tab #11.

Mr. Singleton stated that Tab #12 addresses the previous mention of spot zoning. He said that he and the petitioners do not believe that the request for the subject property is spot zoning because the property is contiguous to AG-1 across Route 130 and there are other areas of AG-1 and CR along Route 130 near the subject property. He said that Tab #13 is a photograph of some of the seedlings planted by the petitioners on the subject property. He said that Tab #14 is a map indicating the location of 1009 trees which have been planted on the petitioner's homestead. He said that Dr. Jones previously indicated that he and his wife planted 2500 trees. Mr. Singleton stated that 1009 trees were discovered on the subject property and the other 1491 trees have been planted on other properties owned by Dr. Jones.

Mr. Singleton stated that Tab #15 is a summary and documentation of the 31.8 acres that Dr. Jones has enrolled in conservation programs. He said that 11.5 of those acres are dedicated to CP21 Filter strips, 15.0 acres are dedicated to CP23 Wetland Restoration, 4.3 acres are dedicated to CP5A Field Windbreak, and 1.0 acre is dedicated to CP81 Grass Waterways. He said that USDA documentation is attached indicating that Dr. Jones planted 670 trees although he is sure that Dr. Jones will later indicate that the total number of trees planted exceeds 670. Mr. Singleton stated that 31.8 acres in conservation is a significant amount of acreage and the 1009 new trees that were found on the subject property is a significant amount of trees and there are a lot of aspects to the type of conservation that Dr. Jones practices.

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2 3 4 5 6	Mr. Singleton stated that when you think about the big picture you have to keep in mind the perspective and the relevance of 1.2 million vehicles traveling up and down Route 130, which is closer to the Hall home than the proposed RLA, and less than 200 take-offs and landings by a helicopter or airplane. He said that the aircraft is lighter than many of the vehicles that are part of the 1.2 million count traveling Route 130. He said everyone has to keep the relative risks involved in perspective.
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8 9 10 11 12 13	Mr. Singleton stated that some concerns and comments have been voiced regarding the berm on the subject property. He said that the intent of the berm was to act as a fence and perhaps Dr. Jones sent the wrong signal to the neighbors and that is why the neighbors are upset. Mr. Singleton stated that the bottom line is that Dr. Jones and his family has done a lot for conservation on the subject property and they have done the best that they can to mitigate any safety issues to any of the neighbors. He said that the risk, in terms of safety, with the RLA versus the traffic on Route 130 is minimal.
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15	Mr. Thorsland asked the Board if there were any questions for Mr. Singleton and there were none.
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17	Mr. Thorsland asked if staff had any questions for Mr. Singleton.
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19 20	Mr. John Hall, Zoning Administrator, asked Mr. Singleton if the plan which has been revised only reflects some of the recommendations made by staff.
21	
22	Mr. Singleton stated yes, and clarified that his letter that he previously submitted is somewhat overstated.
23	
24	Mr. Hall stated that the revised site plan indicates that the runway is 1,640 feet long.
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26 27	Mr. Singleton stated yes. He said that Wayne Ward believed that 1,640 feet would be okay. He asked Mr. Hall if there was an issue with the 1,640 feet.
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1 2 3	Mr. Hall stated that Mr. Singleton's letter suggested that the runway could be 50 feet longer, etc. but when staff finished reading the letter and reviewed the plan it was not clear what was actually being proposed.
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5	Mr. Thorsland stated that Mr. Singleton's letter indicated 1,600 feet.
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7 8 9 10	Mr. Hall stated that the cross-section indicates 1,600 feet and normally staff would take the site plan at face value but the letter indicated that the runway could be 50 feet longer and the slope of the approach area is still in its original position. He said that for a 1,600 foot RLA the approach area would start at the end of the 1,600 foot RLA. He said that this question could be clarified at tonight's public hearing.
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12 13	Mr. Singleton stated that he understands the discrepancy and apologized. He asked Dr. Jones if a 1,600 foot RLA is sufficient.
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15	Dr. Jones stated yes.
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17 18 19	Mr. Hall stated that Tab 8 includes the letter from Greg Durst, Durst Tree Service. Mr. Hall asked Mr. Singleton to confirm that the professional arborist actually stepped foot on the land located on the west side of the river.
20	
21 22 23	Mr. Singleton stated that Greg Durst did not step on to the land that is located on the west side of the river because the land was flooded. He said that the professional arborist made his determination from the Jones' side of the property.
24	
25 26 27 28 29 30	Mr. Hall stated that he agreed with Mr. Singleton in that there is only so much information that can be prepared and ready for a meeting. Mr. Hall stated that he did find on the internet, and he does not know if the Board is interested, an F.A.A. paper on unpaved turf runway criteria which refers to a Montana Department of Transportation standard on airport turf height and maintenance and the Montana standard indicates the following: keep runways clipped to approximately 2-1/2 inches. He said that currently the proposal is to follow the 30% of the wheel height rule.

1 2	Mr. Singleton stated that the petitioner is willing to go along with the original proposal of 30% of the wheel height.
3	
4 5 6 7	Mr. Hall stated that during a previous meeting a citizen presented information that he had found and raised the height of the grass on the runway as an issue. Mr. Hall stated that obviously Dr. Jones has been taking off of the grass runway for several years so it is apparent that Dr. Jones is aware of what is considered safe.
8	
9 10 11	Mr. Singleton stated that taller grass will slow down the aircraft when landing which is a plus but on the other hand the grass should not be so tall as to become tangled up in the wheels. He said that he will let Dr. Jones address this issue.
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13 14 15	Mr. Hall stated that Tab #11 addresses the land management plan. He said that he does not know if the Board will require a land management plan but at a minimum if the Board does the petitioner will need to indicate where it is proposed and how large it is.
16	
17 18	Mr. Singleton stated that the petitioner will submit the information required by the Board.
19 20	Mr. Hall asked Mr. Singleton if all of the 31.8 acres that are enrolled in CRP are located in Douglas County.
21	
22	Mr. Singleton stated yes.
23	
24 25	Mr. Thorsland asked the Board if there were any additional questions for Mr. Singleton and there were none.
26	
27 28	Mr. Thorsland asked if staff had any additional questions for Mr. Singleton and there were none.

1 2 3	Mr. Singleton stated that during previous public hearings there were some materials which were referred to during testimony and underlying supporting documents were not submitted therefore he would like to submit those supporting documents in to the record at tonight's public hearing.
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5	Mr. Thorsland called John Hall to testify.
6	
7 8 9	Mr. John Hall, Zoning Administrator, distributed a new Supplemental Memorandum dated March 14, 2013, and an Attachment G. Item 23 Addition to Case 687-AM-11 Finding of Fact and Final Determination dated March 14, 2013, to the Board for review.
10	
11 12 13 14 15 16 17 18 19 20	Mr. Hall stated that the Supplemental Memorandum dated March 14, 2013, includes new information received from the petitioner. He said that the memorandum reviews the revised site plan and points out the relevant items of evidence that need to be updated to reflect those revisions so that if this case does move to a higher level those revisions are included. He said that the memorandum raises the question regarding the south side transition area and as far as he knows staff has not received documentation indicating that the landowner to the south of the proposed RLA even agreed with the original overlap much less the 49 feet that is proposed currently. He said that in most cases the Board would require such documentation prior to a final determination or require the documentation as a special condition of approval. He said that the Board could determine that documentation indicating the landowner's approval is not a concern and is not necessary.
21 22 23 24 25 26	Mr. Hall stated that the hangar area was reduced by 26 feet which reduced the area of the existing CR district in the vicinity of the hangar to 26,903 square feet. He said that Mr. Singleton's letter indicated that shifting the hangar area will decrease any need to cut trees for the hangar area. Mr. Hall stated that Mr. Singleton may have additional information regarding this issue that he may want to share with the Board.
27	Mr. Hell stated that a new resident state is supported in the many state of the sta
28	Mr. Hall stated that a new special condition is proposed in the memorandum which reads as follows:
29 30	No take-offs or landings shall occur at anytime other than during daylight hours except as required for public safety assistance which may occur anytime necessary.
31	The above condition is necessary to ensure the following:

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That the use of RLA does not occur at nighttime unless required for public safety assistance.

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Mr. Hall stated that the memorandum that was included in the mailing indicated that staff may have a legal review by the State's Attorney by date of the meeting. He said that a legal review has been completed by the State's Attorney although there is no written memorandum to distribute therefore it is up to him to convey the results of the legal review. He said that the good news is that the State's Attorney has determined that it is possible for the County to make a site specific determination regarding adequacy of proposed separation between the given RLA and specific adjacent properties at that location. He said that the bad news is that legal risk can only be minimized to the extent that there are specific considerations related to the specific location. He said that the State's Attorney reviewed the case law suggested by Mr. Singleton as well as other case law and the most relevant case was the Winnebago County case and he was so impressed by this case that he noted that the County could consider nontechnical, things not specifically addressed by I.D.O.T., broader public safety questions posed by an RLA. Mr. Hall stated that he believes that what has been discussed at this public hearing to date are nontechnical broader public safety questions. He said that the Board cannot focus on a specific physical separation unless it can be related to the specifics of the case. He said that the Division of Aeronautics does not concern itself with the non-technical aspects of airports and public welfare so it is the County's duty to make an independent evaluation of those things. He said that to deny simply on the basis of safety the local zoning authority must bring forward some objective evidence on a particular safety problem or hazard peculiar to this RLA rather than speculative fears of local residents. He said to deny simply on the basis of noise there must be standards in the ordinance and an objective determination as to the noise made by the petitioner's plane or its direct dilatory affects such as if this was proposed near a hospital. He said that he has not had a lot of time to discuss these with the State's Attorney but the fact that the dwelling is in the CR District where RLA's are not allowed changing the zoning to now introduce an RLA, and the normal noise associated with an RLA, raises some questions but the State's Attorney was not prepared to go there.

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Mr. Hall stated that the State's Attorney made it very clear that the Board must have specific concerns about this location and this RLA and unfortunately the State's Attorney did not have any specific concerns to recommend. Mr. Hall said that it might be helpful to review four things that occurred to him about this specific location and this RLA. He said that the entire RLA is in the mapped Special Flood Hazard Area and based on the LIDAR ground elevation data some portion of the western end also appears to be below the base flood elevation therefore there should be concern about the wetness of the grass runway following a flooding event. He said that the Board is aware that I.D.O.T. reviews for drainage but he has never seen any reference in the I.D.O.T. literature reviewing for floodplain issues. He said that in context with an RLA, with a focus on public safety, this creates a possibility of a pressure to use the RLA for public safety purposes following a flood event which could have made the RLA especially wet. He said that if that public safety response used a plane what kind of risks are created when an RLA is used

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- during wetter than normal conditions with a plane to simply respond to public safety. He said that he may 1
- 2 be stretching this scenario because he does not know if the plane will ever be used for public safety but he
- 3 remembered some mention of the possibility.

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- 5 Mr. Hall stated that the evidence regarding likely encroachment at the end of the approach slope in the
- 6 riparian woodlands to the west means that the RLA is very speculative and adds to poor suitability of this
- 7 location for a proposed RLA. He said that he did not find that the letter from the professional arborist to
- be very convincing. He said that the soil survey is normally the gold standard for reference and it appears 8
- 9 that encroachment into the approach area is guaranteed.

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- 11 Mr. Hall stated that historically the County has been more lenient towards rural residential development
- in the CR District than in the AG-1 District. He said that the homeowner's who are opposed to the RLA 12
- live in the E.E. Roger's Subdivision which was platted in 1974 which was shortly after the Zoning 13
- Ordinance was adopted in October 1973. He said that anyone familiar with rural land use in Champaign 14
- County knows that there are many times more non-farm dwellings in the CR District than in the AG-1 15
- District and it makes perfect sense to allow an RLA in the AG-1 District and to prohibit them in the CR 16
- District. He said that in that regard item 9.C in Case 687-AM-11 should be revised. He said that 17
- currently item 9.C indicates that all of the land on the subject property is not in the area most suitable for 18
- 19 the CR District. He said that although he proposed item 9.C originally the west 500 feet is below the base
- flood elevation and is located in the floodplain and is subject to be wetter and that the land is suitable to 20
- 21 the CR District therefore he recommends that item 9.C in Case 687-AM-11 be revised.

- 23 Mr. Hall stated that an RLA proposed in the existing AG-1 District would have little impact on the 24
- landscape and there are typically a few neighbors which could be impacted. He said that at this location
- in the CR District the likely impacts on the scenic and natural area that constitutes the CR District are 25
- significant and there are neighbors very close by that will be impacted. He said that Attachment E. 26
- Additional Evidence Related to Suitability and Injury to the District is attached to the Supplemental 27
- Memorandum dated March 14, 2013. He said that there are two proposed changes, based on the State's 28
- Attorney's response, to evidence included in items 8.0 and 8.Z in Case 688-S-11 and the first part of item 29
- 30 22.C in Case 687-AM-11. He said that he went back and read the petition in opposition submitted by
- 31 Larry Hall at the August 11, 2011, public hearing and decided that Larry must have been connecting with
- the State's Attorney telepathically. Mr. John Hall read the following text from the petition in opposition: 32
- We, the undersigned oppose the rezoning in order to protect the existing neighborhoods in the area, 33
- preserve the property values of the homes in the existing residential neighborhoods, protect the wildlife, 34
- farm, and domestic animals in the area, preserve the scenic value as stated in the Zoning Code as one of 35
- the purposes of the Conservation-Recreation classification, protect the safety and welfare of those 36
- 37 traveling along Route 130 and protect the safety and welfare of the homeowners in the existing

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neighborhoods. Mr. John Hall recommended that the text from the petition in opposition be added as evidence in item 8.0 in Case 688-S-11 and the first part of item 22.C in Case 687-AM-11 so that someone reading that will understand not only how many people signed the petition but the concerns that they testified to when they signed the petition.

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Mr. Hall stated that new item 8.Z. is in regard to nuisance noise from the proposed RLA, the berm that has been constructed, and the effect on the scenic qualities of the CR District. Mr. Hall read new item 8.Z. as follows: (1) As indicated on a Survey Exhibit for Dr. Phillip Jones received August 19, 2009, from Koehler Professional Engineers & Land Surveyors (an attachment to the Supplemental Memorandum dated 3/14/13), there is a berm located on the petitioner's property north of the proposed RLA and along the east property line and bordering the rear property lines of the neighboring residential properties; and (2) Petitioner's Attorney Alan Singleton testified at the June 16, 2011, public hearing that one of the purposes of the berm was to serve as a noise barrier to the airplane; and (3) The petitioner Dr. Phillip Jones testified at the August 11, 2011, public hearing in part as follows: (a) He plants native grasses and he assumes that what he has planted is growing; and (b) He is not sure what he is going to do yet regarding maintaining the vegetation on the berm; and (4) At the August 11, 2011, public hearing neighbor Larry Hall testified in part as follows: (a) He is concerned with the safety and noise aspects of the proposed RLA; and (b) He and his wife understood there was noise from the highway when the purchased the property; and (c) The total proposal includes the berms that have been constructed and the lack of maintenance of the berms; and (d) The berm located west of his residence has a grade of 1.2 to 1 and that slope cannot be maintained and the weeds are seven to eight feet tall and why would the Board believe that anything else will be maintained; and (5) At the June 16, 2011, public hearing neighbor Julia Wright Hall testified in part as follows: (a) She and her husband are concerned with the existing wildlife and vegetation of the area and in her opinion increased air traffic over their property would discourage wildlife from using the area; and (b) Before the eight to nine feet embankment was built by Dr. Jones to the west of their home they were able to observe deer grazing in the field but since the embankment was created they have not been able to see any deer; and (c) Her and her husband's view of the natural and scenic area have been destroyed by the wall of dirt topped by tall weeds and thistle and the view will be depreciated even further by the sound of planes and helicopters; and (6) At the June 16, 2011, public hearing neighbor Jean Fisher testified in part that the 10 feet tall dirt berm that has been constructed on the Jones' property is an eyesore and it has forever changed the landscape; and (7) At the June 16, 2011, public hearing neighbor Mark Fisher testified in part as follows: 9a) He and his wife purchased their property over 20 years ago to enjoy the scenic view to the west and south that is zoned CR Conservation Recreation; and (b) He is searching for a valid reason to allow a piece of our historic natural resource to become an airstrip; and (c) He wonders why Dr. Jones does not locate the RLA on his other farmland rather than chipping away at our valued conservation property.

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Mr. Hall stated that also attached to the Supplemental Memorandum dated March 14, 2013, is a letter from the Illinois Historic Preservation Agency indicating that no significant historic, architectural or

1 2	archaeological resources are located within the proposed project area therefore no Phase 1 Survey is required therefore staff recommends that the project WILL NOT IMPEDE Goal 10, Cultural Amenities.
3	
4 5 6 7 8 9 10 11 12 13 14 15	Mr. Hall stated that Attachment G, Item 23 Addition to Case 687-AM-11 Finding of Fact and Determination was distributed to the Board for review. He said that staff reviewed the purpose and intent statements of the Zoning Ordinance and found that paragraph 2.0 (b) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to conserve the value of land, buildings, and structures throughout the County. He said that staff has proposed evidence for item 2.0 (b). He said that paragraph 2.0(e) of the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to promote the public health, safety, comfort, morals, and general welfare. He said that staff has proposed evidence for item 2.0(e) discussing that the property is currently zoned CR and an RLA is not an authorized use in the CR District and the proximity of the RLA to the nearest dwelling. He said that page G-4 of the attachment includes paragraph 2.0(o) which states that the Ordinance states that one purpose of the zoning regulations and standards that have been adopted and established is to protect natural features such as forested area and watercourses.
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17	Mr. Thorsland asked the Board if there were any questions for Mr. Hall.
18 19 20	Mr. Courson asked Mr. Hall if the immediate property to the south of the subject property is zoned AG-1 or CR.
21	
22	Mr. Hall stated that the property is zoned CR.
23	
24	Mr. Thorsland asked the Board if there were any additional questions for Mr. Hall and there were none.
25	
26	Mr. Thorsland called Phillip Jones to testify.
27	
28 29 30 31 32	Dr. Phillip Jones, who resides at 175 CR 1600E, Villa Grove, stated that he would like to address the repeated questions regarding the CR and AG-1 in relation to the subject property. He asked what changes the property by stamping a piece of paper that indicates the zoning district as AG-1 or CR. He said that everything is in place on the actual property for what he and his wife want to do and nothing is going to change. He said that realistically he drives his lawnmower up and down the property at least 150 times

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therefore the grass is not going to get any more use so why is it a hang-up for his request. He said that this is a rubber stamp issue and it does not make sense. He said that he is forced to request that his property be rezoned to CR because that is the law and he does and intends to continue to follow the law. He said that, to him, the question of CR versus AG-1 is senseless and if it were up to him he would leave the property zoned CR and have the permit issued. He said he hates to change the property to AG-1 because it is pointless and does not change anything other than the allowance to obtain a permit for his intended use. He said that it is not his fault that the property is zoned CR and it is what it is but the land is in agricultural use.

Dr. Jones stated that the next question is what happens if the rezoning request fails. He said that what was on the property before he and his wife completed all of their work regarding the prairie grass, trees, etc., the property was bare dirt that was farmed. He said that the land was plowed up baring raw dirt all winter and planted in corn and beans during the spring and summer. He said that he cannot let seven or eight acres of tillable land stand in grass for eight bales of hay a year so he will chisel up the ground and plant it in a profitable corn crop. He said that there are 300 acres of commercial corn within one-half mile of his property so will planting his ground in corn better the environment or conservation.

Dr. Jones stated that he owns a lot of property and he takes care of his properties and they are beautiful. He said that regardless of the testimony from neighbors about the so-called weeds his property is a wildlife haven. He said that if his requests are denied he will be forced to put the land back into crop production and it will look just like the neighboring agricultural properties in row crop. He said that there will not be any deer grazing on grass or bedding in the switch grass. He said that he does not make any revenue from the airplanes or helicopters or the land for the wildlife but he could certainly benefit from the revenue on 15 acres of corn. He said that the he does not care if the Board calls his property CR or AG-1, he only requests a permit for his intended use.

Dr. Jones stated that the signed petition opposing his requests was mentioned during previous testimony. He said that he submitted, to staff, a letter from one of the people who signed the petition and he hopes that the Board read that letter. He said that without attempting to embarrass Larry Hall, he too could have submitted a petition indicating support, not opposition, to his requests but Dr. Jones did not feel the need to go to his friends and neighbor's homes requesting that they sign a supportive petition. He said that his requests are not going to impact anyone. He said that if the federal and state government entities determine that a certain house is not within a danger zone then it is not within the danger zone. He said that the County and the ZBA cannot judge the determination of the FAA or IDOT because they certainly know a lot more about flying than anyone in this room and it is crazy to think that they would allow Larry Hall's home to be involved in any type of safety issue. He said that if the ZBA would approve it he could put a public airport on the property. He said that Larry Hall's house is not in harm's way and no

1 2	professional is going to indicate that it is and if IDOT and the FAA stated that it is not in the safety area then it must be true.
3	
4 5	Dr. Jones apologized for being so loud and rigid but this entire process is tiring and he would like to get it finalized. He said that he would be happy to answer any questions that staff or the Board may have.
6	
7	Mr. Thorsland asked the Board if there were any questions for Dr. Jones and there were none.
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9	Mr. Thorsland asked if staff had any questions for Dr. Jones and there were none.
10	
11 12	Mr. Thorsland asked Dr. Jones if the hay crop on the subject property is enrolled in a government program.
13	
14 15	Dr. Jones stated the subject property is not enrolled in the CRP. He said that the hay is registered yearly on a particular property.
16	
17 18	Mr. Thorsland asked Dr. Jones if the subject property remained zoned as CR due to denial of the map amendment, would he till up the property and plant corn.
19	
20	Dr. Jones stated yes, because he can't do anything with grass and he does not want to mow it all summer.
21	
22 23	Mr. Thorsland stated that Mr. Singleton testified that the grass was a benefit because the runway would be kept short but the side transitions would be baled for hay.
24	
25 26	Dr. Jones stated that if the runway is approved then they could use the side transitions for hay for his livestock. He said that the only reason why the grass was planted at that location was for the runway.
27	

1 2	Mr. Thorsland stated that grass was established at this location for the runway and not for the establishment of an agricultural operation.
3	
4	Dr. Jones stated yes.
5	
6 7	Mr. Thorsland asked Dr. Jones if the only reason why he is requesting the rezoning is so that the runway could be approved.
8	
9	Dr. Jones stated yes.
10	
11 12	Mr. Thorsland stated that the Board has received conflicting information regarding the recommended height of the grass on the runway. He asked Dr. Jones if he mows the grass off of the runway.
13	
14 15 16 17 18	Dr. Jones stated that currently he has not mowed the grass runway so that it can be harvested for hay but if the Board will establish the recommended height for the grass located on the runway he will gladly keep the grass at that height. Dr. Jones stated that he has a large mower and it would only take about one hour to mow the entire runway. He said that he desires to keep the runway's grass at a safe height because he does not want any risks of an accident.
19	
20 21	Mr. Thorsland asked Dr. Jones if he has any documentation from Mr. and Mrs. Bragg indicating that they agree to the side transition area.
22	
23 24	Dr. Jones stated no. He said that Mr. and Mrs. Bragg are currently in Florida but they have verbally indicated that they have no issues.
25	
26	Mr. Thorsland asked Dr. Jones if he could obtain such a document signed by Mr. and Mrs. Bragg.
27	
28	Dr. Jones stated that he is sure that Mr. and Mrs. Bragg will sign any document that the Board requires.

1	
2	Mr. Thorsland requested that Dr. Jones submit a document signed by Mr. and Mrs. Bragg.
3	
4	Dr. Jones agreed.
5	
6 7	Mr. Thorsland asked Dr. Jones if he knows the sound level of his helicopter and the standard sound ratings that the FAA uses.
8	
9	Dr. Jones stated that this information has been previously submitted.
10	
11 12 13 14	Mr. Thorsland stated that Dr. Jones' previous testimony compared the noise generated by his helicopter to the helicopter used for patient transport at Carle Hospital. Mr. Thorsland stated that he does not know the decibels for the one engine helicopter flown by Dr. Jones versus the dual engine helicopter flown by Carle Hospital.
15	
16	Dr. Jones stated that he can submit this information to staff and the Board for review.
17	
18	Mr. Thorsland asked the Board if there were any questions for Dr. Jones and there were none.
19	
20	Mr. Thorsland asked if staff had any further questions for Dr. Jones and there were none.
21	
22	Mr. Thorsland asked the audience if anyone desired to cross examine Dr. Jones and there was no one.
23	
24	Mr. Thorsland called Sara Beth Jones to testify.
25	
26	Mrs. Sara Beth Jones declined to testify at this time.

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2	Mr. Thorsland asked the Board and staff if there were any questions for Mrs. Jones and there were none.
3	
4 5	Mr. Alan Singleton stated that the petitioner has provided a summary of the noise levels and is included in the submitted folder as a Document of Record.
6	
7	Mr. Thorsland called Julia Hall to testify.
8	
9 10	Mr. Thorsland informed the audience that, at this time, testimony should only be in regards to Case 687-AM-11.
11	
12 13 14 15 16 17 18 19 20 21	Ms. Julia Hall, who resides at 177 N CR 1600E, Villa Grove, stated that her property abuts the proposed RLA. She said that she and her husband purchased their home from Richard and Julie Lively in May 2004 which was before Phillip and Sara Beth Jones purchased their property and built their home. She said that at the December 13, 2012, public hearing the Board requested documentation regarding the trees along the east branch of the Embarras River. She said that she had originally contacted Sandy Mason, Extension Educator for Horticulture at the University of Illinois Extension Office, although Ms. Mason referred Ms. Hall to Jim Payne, Master Naturalist at the University of Illinois Extension Office, who then referred her to Roger Jansen, Heritage Biologist, Illinois Department of Natural Resources District 14 NHB, based in Charleston, IL. She said that Mr. Jansen supplied a link for information regarding the species of trees found in the Embarras River Basin. She noted that the listing in the mailing packet from the Morton Arboretum is a much better list than the one that she will submit.
23	
24 25 26 27 28 29 30 31 32 33	Ms. Hall stated that the neighbors and the Board have been focusing on the trees but there are many other things that will be impacted by the proposed use. She said that the impacts on the environment will be much greater than just on the trees. She said that there are many native oak trees but there are also shrubs, vines, birds, wildlife and reptiles which will be affected by the removal or destruction of trees along the Embarras corridor. Ms. Hall read the following excerpts from the website of the Embarras River Basin Critical Trends Assessment: 1. The Embarras has its headwaters in the morainal upland on the southern fringe of Champaign-Urbana and is the second largest Illinois tributary of the Wabash; and 2. The river's basin has a net comprising 2,440 square miles and portions of eleven counties: Champaign, Clark, Coles, Crawford, Cumberland, Douglas, Edgar, Jasper, Lawrence, Richland and Vermilion; and 3. No naturalist who studies the river basin can question the Embarras' importance because two sections of

the river, a total of 112.5 miles, second highest in the state, come under the official "Biologically

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1	Significant Streams" ranking; and 4. Of the 299 bird species that normally occur in Illinois, at least 267
2	(89%) have been recorded in the Embarras region; and 5. The basin's forested uplands are home to such
3	characteristic tree species as black, red and white oaks, shagbark, mockernut hickories, basswood, sugar
4	maple, and, in the southern reaches, American beech; and 6. Upland forest birds range from the barred
5	owl and wild turkey to black-capped Carolina chickadees, and from the blue jay, scarlet tanager,
6	Kentucky warbler, white-breasted nuthatch, and the red-bellied, downy, and hairy woodpeckers.
7	Mammals most often encountered include the hoary and silver-eared bats, gray fox, eastern chipmunk,
8	southern flying squirrel, gray and fox squirrels, and woodland vole; and 7. A multitude of birds are
9	drawn to this watery environment for the bounty of food it provides such as mallards, bald eagles, hawks,
10	and green and great blue herons are all familiar sights; and 8. The Embarras and its feeder streams
11	contain zones of what the Illinois State Geological Survey characterizes as sever bank erosion; and 9.
12	The loss of forested land in the area may be similar to or somewhat greater than the rate for the state as a
13	whole, only about 30%, of the pre-settlement area of forest remains and the amount that is old growth is
14	vanishingly small.

15

Mr. Thorsland requested that Ms. Hall summarize the assessment and submit it as a Document of Record.

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Ms. Hall agreed. She said that replacing old growth trees from their natural habitat with tiny seedlings on top of the berm on the subject property is not the answer. She said that the Embarras area is full of endangered species and she wanted to bring this information to the Board's attention. She said that decreasing the wooded areas around the Embarras, in any amount, for pleasure use will only continue to erode this necessary river.

23

Ms. Hall stated that in many instances Dr. Jones has indicated that he assists several agencies for search and rescue. She said that there is a big difference between being Dr. Jones being asked to volunteer his services and Dr. Jones volunteering his services and one of those big differences is liability. She said that the Board has seen letters indicating that Dr. Jones does assist with emergency services. She said that during the fire in downtown Villa Grove a small plane was flying over the fire which hindered rescue operations. She said that Sara Beth Jones testified that it was not Dr. Jones that was flying over the fire.

30

Ms. Hall stated that one of the many aircraft that Dr. Jones owns is a WACO UPF-7 and during her research she found that this particular plane has been involved in two separate accidents, one due to crosswinds and the other due to failure of the pilot to maintain directional control during landing with a quartering tail wind, resulting in the aircraft nosing over and coming to rest inverted. She submitted documentation from the Aviation Database as proof of these accidents and submitted the documentation as a Document of Record.

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2	Mr. Thorsland stated that the Board understands that the plane has been involved in an accident and accepted Ms. Hall's submittal in the record.
4	
5 6 7	Ms. Hall stated that accidents do happen therefore is her family expected to evacuate their home and take cover when they hear a plane approaching. She said that the petitioner will more than likely fly his aircraft on the weekends when she and her husband are attempting to have a day of rest.
8	
9 10 11 12 13 14 15 16 17 18 19 20 21 22	Ms. Hall stated that she would like to address Mr. Singleton's assertion about the possibility of a land vehicle hitting her home. She said that such an event is a remote possibility but reminded the Board that her family chose to purchase and live at their property which is located next to the highway and did not choose to live next to a landing strip. She said that they chose to live in a peaceful, quiet, rural area where they could look out their window to observe the deer, birds, and other wildlife. She said that if they did desire to live near a landing strip they could have moved to a home located at Aerospace Subdivision. She said that Mr. Singleton's examples only prove that accidents do happen and when the SUV driver left his home that morning she is sure that he did not intend on driving into a home that morning. She said that should a plane hit her home, unless it is a suicide mission, it will not be a planned event but as Mr. Singleton pointed out, accidents do and can happen. She said that their home is a lifelong investment and they plan to retire peacefully and die in this home but they would rather die from old age than from a plane crashing into their living room. She requested that the Board ask Dr. Jones if he has ever been involved in an aircraft accident because she has been told that he has been involved in a helicopter incident.
23 24 25 26 27 28 29 30	Ms. Hall stated that page 27 of 40 of the Revised Draft Summary of Evidence dated March 8, 2013, indicates two proposed special conditions, 12.A. and B. which cannot be enforced by the Zoning Administrator and encourages the petitioner to follow such rule on an honor basis so as to help ensure good neighborly relations. She said that during previous hearings it has been demonstrated that through all outward appearances the honorable petitioner does not desire to ensure good neighborly relations. She said that construction of the berm along the entire east side of the subdivision and allowing it to grow up in weeds is not a neighborly gesture.
31	
32	Mr. Roger Miller stated the berm has no relevance to the rezoning.
33	

Mr. Thorsland stated that Mr. Miller is correct but it does go with the quality of the case.

1	
2 3 4	Ms. Hall stated that she and her husband were out walking in their yard one day and the police arrived at their home due to a call that they received regarding trespassing. She said that this is not the act of a person who wants to have good neighborly relations.
5	
6 7	Mr. Thorsland noted that this is not a character case therefore Ms. Hall should only discuss evidence regarding the map amendment.
8	
9 10	Ms. Hall stated that she is only trying to give an example of the honor of the petitioner regarding good neighborly relations.
11	
12 13	Mr. Thorsland stated that he will shortly ask the Zoning Administrator what his office will do if they receive a complaint from the neighbors.
14	
15 16 17	Ms. Hall stated that the Board received various letters from realtors regarding the property values of the neighboring properties of the proposed RLA. She asked the Board which they would choose if they had an option whether to purchase a home next to an RLA or a home which was not next to an RLA.
18	,.
19 20 21 22 23 24 25 26 27	Ms. Hall stated that Mr. Durst does not include any specific types of trees in his letter and states that the species, according to reference books, have a theoretical height taller than their current height, and it is unlikely that they will grow any taller in height at this point. He said that the trees at the edge of the wooded area are unlikely to increase in height because they are fully exposed to the sun on their eastern side and hence do not need to grow taller to compete for additional sunlight. Ms. Hall stated that she received an e-mail from Alexandra Julius, Educational Development Manager, International Society of Arboriculture, which states that edge trees tend to grow taller quicker because of light competition and a tree's mature height in a forest stand will be whatever it takes to out compete the other trees, which is different for a tree of the same species grown alone.
28	
29 30 31	Ms. Hall stated that she also received an e-mail from Roger Jansen, Heritage Biologist, Illinois Department of Natural Resources District 14 NHB, stating that the trees will continue to grow despite the additional sunlight. Mr. Jansen stated that the rate at which trees grow varies with species and soil

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1 conditions and oaks in general will grow slower than cottonwoods and trees found in the area where the 2 soil is poor will grow slower than trees in good soil. 3 4 Ms. Hall stated that Mr. Durst also indicated in his letter that in the unlikely event that some trimming of 5 the trees were needed due to growth, the trimming would be minimal and would not affect the overall 6 health of any specific tree or the forest as a whole. Ms. Hall stated that according to Ms. Julius any type 7 of tree in the forested area will have a significant impact on the remaining trees and could cause them to 8 fail. Ms. Julius stated in her e-mail that the condition of these trees depends on if they have always been 9 edge trees or are recently exposed and recently exposed trees are more likely to fail quicker, as they have not adapted to the wind and sun as exterior trees would. Ms. Hall stated that when Dr. Jones removes the 10 amount of trees that he needs to remove for the proposed hangar the trees that remain will be negatively 11 12 impacted and are likely to fail. She said that the entire environment of the area will be impacted due to 13 the desire to have a few weekends for flying. She added that Dr. Jones indicated that there are trees 14 around the pond but there are no trees around the pond and if he is referring to the trees that were planted 15 on the berm those trees are soft pine trees and not hardwood trees. She said that the trees that were 16 originally planted on top of the berm died due to the lack of water and were replanted in 2012. She said 17 that according to Mr. Durst the seedlings will not grow very tall because they will not need to because 18 they will have adequate sunlight. 19 20 Ms. Hall stated that she would also like to submit evidence that Mr. Durst is not a certified arborist. She 21 said that her family is also tired of this case and they have presented mounds of evidence, not just personal opinion, in objection to these requests. 22 23 24 Ms. Hall stated that Mr. J.C. Crawford called her husband requesting a time to meet him at the Villa 25 Grove Ag Days Celebration so that he could sign the opposing petition. 26 27 Mr. Thorsland stated that the best thing that could occur to put this matter to rest is that Mr. J.C. Crawford 28 would attend the next public hearing to clarify whether he does or does not support the proposed requests. 29 30 Ms. Hall stated that the bottom line is that Dr. Jones wants to fly his plane for recreational and supposedly agricultural purposes. She said that Dr. Jones' farm ground is located in Douglas County not Champaign 31 32 County therefore if the property is rezoned to AG-1 no row crops will be planted on the soil but it will 33 house an air strip. She said that the Board should not grant the rezoning for a just-because reasoning and 34 like a child Dr. Jones wants what he wants on his property. She said that there are already enforceable

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2 3 4 5 6	Champaign County. She said that the petitioners have already not complied with the rules and regulations of Champaign County and by their own actions they are already at odds with their neighbors. She said that the only thing that we leave behind is a concrete stone which indicates the day that we were born and the day that we died but it is the dash in between that indicates how we lived and how we will be remembered when we are gone. She requested that the Board deny the petitioner's requests.
7	
8 9	Mr. Miller stated that it is a property owner's prerogative if they wish to remove and plant trees upon their own property.
10	
11 12 13	Mr. Thorsland stated that Mr. Miller is correct although mature trees will be removed for the special use and the Board has received conflicting testimony about the impact of those tree removals in the CR District.
14	
15	Mr. Thorsland asked the Board if there were any questions for Ms. Hall and there were none.
16	
17	Mr. Thorsland asked if staff had any questions for Ms. Hall.
18	
19 20 21 22	Mr. Hall asked Ms. Julia Hall if during her reading she found any difference between the environmental qualities along the main stem of the Embarras River versus the environmental quality along the east branch of the Embarras River. He said that Ms. Julia Hall read a lot of information regarding the Embarras River but there was no mention regarding the east branch of the Embarras.
23	
24 25	Ms. Julia Hall stated that she would have to review her notes but from her perspective it all flows together as a drainage system therefore what impacts one impacts the other.
26	
27	Mr. Hall stated that there is a big difference therefore he encouraged Ms. Julia Hall to investigate it.
28	
29	Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Hall and there was no one.

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1 Mr. Thorsland called Larry Hall to testify.

Mr. Larry Hall, who resides at 177 N County Road 1600E, Villa Grove, stated he has lived there for four years and he has never seen 1.2 million vehicles take off or land near his house and he does not understand the relevance of such an absurd comparison. He said that Mr. Singleton stated that the risk comparison should be kept in perspective but risk is risk. Mr. Hall stated that Dr. Jones indicated that he does not make any money off of the airplanes although during previous testimony Dr. Jones indicated that he invested in planes. Mr. Hall stated that he would assume that Dr. Jones invests his money wisely therefore it could be assumed that Dr. Jones buys and sells those airplanes to make money.

11 Mr. Thorsland requested that Mr. Hall's testimony only relate to the map amendment case.

 Mr. Larry Hall stated that during Dr. Jones' testimony he referenced the petition opposing the requests and the signatures that were on that petition. Mr. Hall stated that it is true that his son and daughter-in-law signed the petition as well as Mr. Fisher's mother. He said that these immediate family members do have a vested interest in their property because if something were to happen to them it is possible that one of those immediate family members could reside at the property. Mr. Hall stated that he would like to highlight a few things from the Finding of Fact and Final Determination dated March 14, 2013, for Case 687-AM-11. He said that the last sentence in item 5.A. on page 2 of 26 reads as follows: In addition, if rezoned, the land would serve the agricultural needs of the applicant's other agricultural properties and activities as the applicant will be applying for an RLA special use permit, which would not be permissible with current zoning. Mr. Hall stated that it seems to him that all of the agricultural activities that the petitioner is interested in participating in are already happening in the properties current CR zoning. He said that rezoning the property is not necessary for the growing of crops therefore he does not understand what agricultural benefit is being served by the rezoning.

 Mr. Larry Hall stated that the second sentence in item 5.B. reads as follows: Rezoning to AG-1 allows for more efficient use of the land whether as a matter of right (plant nursery, advertising signs, tree sales lot) or with special use permit (e.g., RLA permit, among many others). Applicant would like to be able to take advantage of all of these commercially beneficial activities, encouraged by the LRMP. Mr. Hall stated that he is not an arborist but he believes that the pine trees that have been planted on the berm with a three foot separation will eventually have to be thinned out.

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1 2 3 4 5 6 7	Mr. Larry Hall stated that item 4.C.(3) stated that the County may authorize a discretionary review development provided that existing public services are adequate to support the proposed development effectively and safely without undue public expense. He said that his interpretation of the paragraph is that will it be reasonable for the County to service it safely without any public expense or if additional public expense will be required for running water, etc. He said that he agrees that there should not be any public expense incurred due to the rezoning but he does not understand the relevance of 4.C.(3)(a) which indicates the advantages of Dr. Jones' public services going outward to the community.
9 10 11 12 13 14 15 16 17	Mr. Larry Hall stated that item 18.A.(2)(c) stated that the petitioner testified at the August 11, 2011, public hearing that the trees will not be damaged, touched, or violated in any way during the use of the proposed RLA. Mr. Larry Hall stated that there has been conflicting evidence regarding this issue and he believes that during the construction of the proposed RLA the trees will be damaged, touch, or violated. He said that 18.A.(2)(d) stated that the petitioner testified at the December 13, 2012, public hearing that he has planted over 2,500 native hardwood trees on his property. Mr. Larry Hall stated that the trees which were planted were not all hardwood trees and that pine trees were actually planted on the property. He said that the planting of various trees does not justify or compensate destroying the existing natural habitat for personal convenience.
18 19 20 21	Mr. Larry Hall stated that item 20.A(1)(c) stated that the petitioner has not yet provided the results of a Phase I Archaeological Survey.
22 23 24 25	Mr. Andrew Kass stated that staff received a letter from the State Historic Preservation Agency indicating that a Phase I Archaeological Survey is not required on the subject property. He said that the letter was received after the mailing date for the case packets therefore it is attached to the March 14, 2013, Supplemental Memorandum.
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27 28 29 30	Mr. Larry Hall stated that item 22.H.(2) indicates that Dr. Jones has been flying for over 20 years and has never had an incident of any kind and the argument regarding crosswinds is not an issue. Mr. Hall stated that his wife submitted evidence indicating that a pilot did wreck an airplane that is owned by Dr. Jones which was involved in an incident due to crosswinds.
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32 33	Mr. Thorsland stated that Dr. Jones' testimony was that he had never had an incident of any kind due to crosswinds.

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Mr. Larry Hall stated that item 22.H.(3) indicates that Larry Hall's house is further away than almost all airport hangars to a landing strip and it is impossible to drive an airplane through the five feet of grass that is near Mr. Hall's property. Mr. Larry Hall stated that it probably is impossible to drive an airplane through the five foot of grass and he does not expect Dr. Jones to drive through the five foot of grass that is near his property but he does worry about the take-offs and landings near his property. He said that item 22.H. (4) indicates that an airplane's engine is on idle when it lands therefore Dr. Jones' aircraft will be quieter than his diesel truck is when he drives down his lane. There may be a little noise when he takes off but he will be 1,000 feet in the air when he passes over Larry Hall's house. Mr. Larry Hall distributed previously submitted photographs to the Board and staff for review which indicate that the airplane is not 1,000 feet in the air when it passes his home. He said that the photograph was taken from his rear patio and includes two mature pine trees and indicates how high the plane actually is in the air when it passes his house therefore contradicting the statement in item 22.H.(4). Mr. Larry Hall submitted the photographs as Documents of Record.

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Mr. Larry Hall stated that item 22..K states that at the December 13, 2013, public hearing Linda Schumm, Bureau Chief Aviation Safety IDOT, testified that air traffic control will not tell a pilot to land in an RLA, but will tell the pilot that there is an RLA in the area because it is always safer to land on a runway than on a cornfield or road. Mr. Larry Hall stated that the attachment to the Supplemental Memorandum dated March 8, 2013, titled Grass Landing, indicates that perhaps the most significant benefit of grass-field capability is the additional 11,000 plus potential emergency landing options that grass fields provide throughout the United States. He said that Ms. Schumm confirmed that air traffic control will indeed indicate to a pilot that there is a place to land which increases his family's concerns about having a distressed pilot landing 143 feet from their home instead of 107 feet which is not a big difference. He said that the article continues to indicate that according to the Civil Aviation Authority (CAA), approximately one-third of reportable general aviation accidents in the United Kingdom occur at unlicensed (private) grass fields during takeoff or landing In the United States, the National Transportation Safety Board data also indicates a similar situation. Mr. Larry Hall stated that the following coincides with Mr. John Hall's earlier testimony regarding his concerns with the floodplain: Conversely, a much greater stopping distance is needed after a heavy dew, frost, or rain all of which can render aircraft brakes and steerable nose wheels and tail wheels virtually ineffective. Pilot's operating handbook figures are based on a dry grass runway and are therefore useless for calculating distances in other situations and the CAA suggests increasing wet grass landing distances by 60 percent "like an icy surface." He said that if the landing area is increased on the proposed project by 60% would be into the trees, which is probably why all other landing areas presented at the last meeting were out in the middle of open areas.

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Mr. Larry Hall stated that item 22.L states that a letter received December 13, 2012, from Jongin Kim Craggs, Residential Appraiser, indicates that it is her professional opinion that the proposed RLA would not cause any decrease in property values and that because of the assistance provided to local law

1 2 3 4 5	enforcement property values may increase because of the greater community safety. He said that he will submit a letter that he wrote after the August 11, 2011, ZBA meeting documenting a phone conversation between himself and Dr. Jones. He said that during the conversation Dr. Jones challenged the professional opinion letter from the Hall's realtor and stated that anyone can get a realtor to write a letter saying anything. Mr. Larry Hall stated that his response was that this was not the approach that he chose to take.
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8	Mr. Thorsland asked Mr. Larry Hall if he would be submitting this letter as a Document of Record.
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10	Mr. Larry Hall stated that he will submit any information that the Board requests.
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12 13	Mr. Thorsland stated that it is up to him as to what he desires to submit as a Document of Record. He said that there is no time limit but asked Mr. Hall if he was close to the end of his testimony for tonight.
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15 16 17 18 19 20 21 22 23	Mr. Larry Hall stated that everyone has indicated that they are tired of this case and the Summary and Finding of Fact documents that there have been seven meetings that have spanned almost two years. He said that the pattern of bringing in packets of new information to the meetings or submitting them two or three days prior to the meeting is also tiresome therefore he would like to know when it will be considered that enough is enough. He said that it is not about investments, outside backers, etc. but the amount of money that is being spent upon this project is supposedly being done to gain a few minutes of time to assist emergency services, which is probably 12 to 15 minutes since the current hangar for Mr. Jones' aircraft is located near Tuscola. He said that this appears to be that Dr. Jones wants what he wants and the status that comes with it while ignoring the rights and concerns of his neighbors.
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25	Mr. Thorsland asked the Board if there were any questions for Mr. Larry Hall and there were none.
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27	Mr. Thorsland asked if staff had any questions for Mr. Larry Hall and there were none.
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29 30	Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Larry Hall and there was no one.
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Mr. Thorsland called for a ten minute recess. He reminded everyone that this is not a trial but a public 1 2 hearing and there are no set time limits for testimony although the meeting itself does have a time limit 3 and he would like to get through the witness register tonight. 4 5 The meeting recessed at 8:40 p.m. 6 The meeting resumed at 8:50 p.m. 7 8 Mr. Thorsland stated that it is 8:50 p.m. and the meeting ends at 9:30 p.m. He said that he cannot request 9 that someone end their testimony but he does not intend to extend the meeting past 9:30 p.m. 10 11 Mr. Thorsland called Mark Fisher to testify. 12 13 Mr. Fisher requested that Jean Fisher testify. 14 15 Mr. Thorsland stated that Mr. and Mrs. Fisher may testify as a team if they so desire. 16 17 Mr. Fisher declined. 18 19 Mr. Thorsland called Jean Fisher to testify. 20 21 Ms. Jean Fisher, who resides at 195 CR 1600E, Villa Grove, stated that since this case has been going on for a long time she was not sure if the ZBA had realized that the letter dated March 3, 2011, from the 22 23 Illinois Department of Natural Resources states that if the project has not been implemented within two 24 years of the date of the letter a new consultation would be necessary. She noted that the project is past the 25 expiration date stated in the letter. 26 27 Ms. Fisher stated that Champaign County LRMP Goal 8 states as follows: Champaign County will strive 28 to conserve and enhance the County's landscape and natural resources and ensure their sustainable use.

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- 1 She said that Dr. Jones has referenced that he owns property in Douglas County where his helicopter is
- 2 currently stored. She submitted a copy of the property information for Dr. Jones' property located in
- 3 Douglas County obtained from the Douglas County Assessor's website.

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- 5 Ms. Fisher stated that the Champaign County Board would best serve LRMP Goal 8 by not allowing the
- 6 requested rezoning and special use and that 100% of the surrounding properties located in the CR District
- 7 will remain intact and free from impact.

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- 9 Ms. Fisher stated that according to the Flight School and Aviation Training Index Dr. Jones is listed as a
- 10 flying instructor. She said that Mr. Singleton's submitted article from The News Gazette regarding the
- use of helicopters during rescue efforts with Hurricane Irene was to demonstrate some sort of public
- safety need. She said that any reasonable person who lives in Illinois is aware of the fact that we do not
- experience hurricanes and if Dr. Jones want to assist a state which does experience hurricanes then she
- would suggest that he go for it as long as he takes off from his property located in Douglas County.

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- Ms. Fisher stated that she feels that the liability with the use of a private citizen is probably too great for
- policing agencies therefore another option that may be available to those agencies is the use of drones.
- 18 She said that drones are an easier, cheaper, and faster way to search with the additional benefit of the
- 19 release of liability in the use of private citizens. Ms. Fisher submitted an article for WICD Channel 15 as
- 20 a Document of Record.

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- Ms. Fisher stated that in regard to Mr. Singleton's statement at the December 13, 2012, public hearing he
- 23 referred to the weight of a Ford F-150 truck and the weight of a small helicopter or plane to be roughly
- 5,000 pounds and equated such to an 80,000 pound semi-truck. She said that she would presume that Mr.
- 25 Singleton is attempting to indicate that when compared the plane would be of little comparison to its
- degree of damage capability to a semi-trailer. She said that with all due respect to Mr. Singleton she has
- 27 been doing some research regarding this issue and has attempted to search any reference to a scale of
- damage and she found nothing to demonstrate the difference in the degree of death if hit and killed by a
- 5,000 pound plane or an 80,000 pound semi-truck. She said that dead is dead with no difference in the
- degree and her family would not grieve to any lesser degree if she were killed by a 5,000 pound plane or
- degree and not among would be greeve to any resider degree it sine were kined by a 5,000 pound plane of
- 31 an 80,000 pound semi-truck therefore she does not take any comfort in his comparison and actually takes
- 32 offense by it.

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Ms. Fisher stated that Mr. Singleton and Dr. Jones both testified to the safety of aircraft and that an accident with aircraft is very rare. She said that per a The News Gazette article dated March 4, 2013, titled Fire near Cisco destroys hangar, experimental plane, vehicles. She said that as she specifically addressed at a previous meeting, everything that is described in this article is a potential problem for the petitioner's request for the people, homes and conservation areas of the E.E. Rogers Subdivision and it was even made light of that such an event would never happen. She said that the petitioner's request would present more of an issue because it has the close proximity to homes, large slow growing forested area, as well as a major river tributary, which is the Embarras River. She said that the rural Cisco RLA was in a sterile runway field. She said that the article reads as follows: A storage shed used as a hangar for a rural Cisco landing strip was destroyed by fire Sunday evening. An estimated 30 firefighters from six fire districts battled the fire at 179 East 1300 North Road, which claimed not only the 40' x 60' shed but several vehicles, including an experimental plane constructed by the company that uses Gary Norfleet's landing strip as a launching point for crop dusting. Their immediate concern was farm chemical cans that were exploding during the fire, and a pair of 250 gallon tanks of aviation fuel located less than 100 feet from the shed. Mr. Weishaar, emergency response personnel, stated that their first concern was cooling down those tanks but the tanks were saved as was a one-story home on the property but he estimated that the loss at \$200,000 due to the contents of the structure, a plane, dual-cab pickup truck, motor home, tractor, antique tractor, ATV and several pieces of professional lawn care equipment. Due to the high dollar loss the cause of the blaze is considered undetermined at this time and they had no reason to believe that there was anything suspicious in nature about the fire. Ms. Fisher stated that if there was nothing suspicious about the previously stated fire then she would tend to believe that it was accidental.

Ms. Fisher stated that she will submit all of the articles and additional information as Documents of Record for staff and Board review. She said that she will review some of the additional articles briefly. She said that on February 25, 2013, a Tennessee doctor was killed in a single-engine Piper Arrow plane in Florida and 15 acres of land burned near the crash site. She said that on December 4, 2012, Larry Diffley, President of Bemidji Aviation Services in Bemidji, MN, crashed a multi-engine Beech 58 in a field which was one-half mile away from two homes and the debris field spread five to six hundred yards away from the crash contact area. Ms. Fisher stated that on October 17, 2012, a fiery helicopter crash claimed a member of a Pennsylvania Fire Company who was a retired 24-year state trooper who flew choppers for the state police. Officials at the scene were trying to determine whether Cpl. Doug Brigham took off from a helipad on his property or from the Van Sant Airport about three miles away. The helicopter went down just a few hundred feet from Brigham's home and he appeared to have been thrown from the chopper when it crashed. She said that on August 11, 2012, a 30-year old accomplished pilot and aircraft mechanic was killed after a skydiving plane crashed in a residential area and the debris from the crash spread across two or three blocks.

Mr. Thorsland asked Ms. Fisher if she planned to submit all these articles as Documents of Record.

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2 Ms. Fisher stated yes.

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4 Mr. Thorsland stated that the Board will receive this information in the next mailing therefore he would appreciate it if she would only summarize any additional information.

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Ms. Fisher stated that the petitioner is requesting agricultural zoning for non-agricultural use therefore if
he is using the property for the RLA he is taking the land out of production use. She said that the
petitioner stated that he grows hay on the grass strips although he only gets 10 bales of hay which is very
confusing.

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12 Ms. Fisher presented Google maps of the subject property and surrounding area. She said that the map 13 indicates Section 27 of Crittenden Township and the subject and surrounding properties. She said that the area following Route 130 along the Embarras River is saturated with trees and is very thick. She said that 14 15 the 1973 and 1993 GIS maps indicate that the trees were not as big and concentrated as they are currently. 16 She indicated the areas of AG-1 and the areas of CR in Section 27 and stated that the proposed rezoning 17 should be considered spot zoning because the founding fathers of the County had a reason why they designated this area as CR and that was because of the trees along the river basin. She said that the 18 19 adjacent farm ground to the east is zoned AG-1 but that is because there are no trees on that side of the 20 road therefore it stands to reason why the subject property should remain CR. She said that it was 21 previously mentioned that if the requested RLA is approved that another questionable RLA near the 22 subject property, helicopter landing pad with repair services, is within one mile of each other which 23 presents an additional safety issue for the area. She said that there may be low flying planes and 24 helicopters in the same area and it is unknown whether or not they contact each other when they take off 25 and land.

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27 Ms. Fisher stated that according to the Forest Land Management Productivity Article, published in 1997, 28 less than one percent of Champaign County's acreage was forested. She said that the article further states 29 that the largest area of forest land is around major rivers and is generally well suited to growing high 30 quality trees. She said that productivity of the trees is accomplished by proper management and 31 management measures needed in these areas are those excluding livestock from the stands. She said that 32 the current area where Dr. Jones' livestock inhabits is in the low land and heavily forested area as 33 opposed to a typical farm field and there is already a demonstrated destruction of this conservation area. 34 She said that Dr. Jones has moved the cattle for three days to a higher area pasture but the low lying area

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has been ripped up by the cattle. She submitted photographs of what she feels her family is exposed to by

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Dr. Jones' family operation.

3 Mr. Thorsland reminded Ms. Fisher that the photographs need to provide evidence regarding the map 4 amendment and not how the property is being kept. 5 6 Ms. Fisher stated that the photographs establish how the property is managed for conservation and 7 preservation. 8 9 Mr. Thorsland stated that what is occurring on the subject property currently, even though it is relevant to 10 the Fisher family, is not relevant to the map amendment case. He said that it would be very helpful if 11 photographs were submitted about the land and safety issues and not whether or not the property has 12 thistle. 13 14 Ms. Fisher stated that she understands Mr. Thorsland's point but her concerns are not about thistle. 15 16 Mr. Thorsland stated that even though he appreciates Ms. Fisher's concerns he does not want the cases to continue in perpetuity while the Board reviews photographs. He requested that the information remain 17 18 relevant. 19 20 Ms. Fisher stated that she does not believe that the opposing parties have ever requested a continuance. 21 22 Mr. Thorsland noted that it is only the Board who can request a continuance. 23 24 Ms. Fisher stated that the photographs indicate what she views from her property. She said that she views 25 a stand of rag weeds and a home improvement semi-trailer which is conveniently located between the 26 trees. She said that the bottom land has minimal flooding and the photograph indicates the livestock 27 fencing which houses the cattle that have free run of the area. She said that the trees that were knocked 28 down near Dr. Jones' tool shed have been left at the location that they were dropped which happens to be in the area of the river basin where flooding occurs. She said that leaving these trees at their current 29 30 location assists with damming of the river which affects the natural flow of the river and causes additional

1 2	flood issues. She said that Dr. Jones has piled manure right along her property line and she would like the Board to address this matter.
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4	Mr. Passalacqua noted that Ms. Fisher is swaying away from the map amendment.
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6 7 8	Mr. Thorsland stated that if Dr. Jones so desires he could clear cut all of the trees on his property without permission from the zoning department. He said that testimony should only refer to the map amendment.
9 10 11 12 13 14 15 16 17	Ms. Fisher stated that Dr. Jones indicated that he planted 2,500 trees on the subject property. She said that Dr. Jones stated that he planted trees on the berm but they died and were replanted within six months. She said that Dr. Jones indicated that he planted hardwoods which are oaks, sycamores, etc. not pine trees. She said that if a tree that is 60 foot tall with a good diameter along the river basin is removed then the erosion of the river basin is changed. She said that the larger trees have huge roots which maintains the river basin in place and to say that those mature trees will be swapped out with seedling trees is not safe. She said that simply planting trees in another area with no guarantee for maturity is not a replacement for the natural landscape, erosion control, conservation of species and sustainability of the natural resources in the area. She said that his entire project could change the environment.
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19	Mr. Thorsland asked the Board if there were any questions for Ms. Fisher and there were none.
202122	Mr. Thorsland asked if staff had any questions for Ms. Fisher and there were none.
23	Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Fisher and there was no one.
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25 26	Mr. Thorsland called Mark Fisher to testify. He requested that only new testimony regarding the map amendment case be presented.
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28 29 30	Mr. Mark Fisher, who resides at 195 CR 1600E, Villa Grove, presented a Google map of the subject property. He said that the public has not been presented an overview of how the airstrip and the angles coming off the airstrip would impact the property and it is his opinion that this would be a great place to

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have started. He said that the area that is outlined in orange on the map is the property that has been requested for the rezoning and the two blue areas are the runway approach. He said that the trees at the west end of the runway have not been addressed and no one has measured the heights of the trees or measured the distance from the end of the runway to the tree line. He said that Mr. Wayne Ward testified at the last meeting that when the runway was to be in the center of the zoning area the tree line did not start until approximately 2,500 feet but Google Earth disagrees. He said that everything that is outside of the black box, as indicated on the Google map, is outside of the property. He said that at 737 feet from the end of the runway at a 15:1 slope there could not be a tree higher than 58 feet and that takes into account the difference in elevation. He asked how a tree taller than 58 feet will be dealt with.

Mr. Fisher stated that he agrees with Dr. Jones' statement that these cases have gone too long and he understands that Dr. Jones only wants an airport but the problem is that the petition was based on two principals, agricultural and law enforcement aid. Mr. Fisher stated that the *Illinois Administrative Code* indicates that no crops can be within 50 feet of the centerline. He said that the questions that he has been waiting to hear answers for are the following: 1. Is there evidence to show financial harm to the petitioner if the rezoning is denied; and 2. Has staff received a letter from a farmer, seed company, fertilizer company supporting agricultural cause for the petitioner; and 3. Is there any evidence from any agricultural expert supporting the petitioner's claim. Mr. Fisher stated that he has not heard or seen any answers to these questions therefore he would assume that there are none. He said that Dr. Jones admitted that he only wants the airstrip and no agricultural product will be raised on the property. Mr. Fisher asked if 13 acres, which once was planted in row crop and is no out of production, should be allowed for an RLA.

Mr. Fisher stated that there have been letters submitted from law enforcement officials which is a good start but it is just that, a good start. He said that we all know the legal anomaly involving state and private entities working together but there is a multitude of legal issues that need to be addressed before this idea becomes to pass. He said that it is a known fact that Dr. Jones is a dentist and Mrs. Jones has testified that Dr. Jones works long days and as a business owner Mr. Fisher absolutely believes Mrs. Jones but the question is how can a dentist who works this many hours aid law enforcement at a moment's notice. He asked why the Board should be required to make a permanent decision based on an idea that may not be factually feasible.

Mr. Fisher stated that it has been two years and the petitioner has had an extra year to gather factual information to satisfy the ZBA and it is of no fault of the Board that he has not done so. He said that it is his opinion that a pattern is being set by the Board in allowing continuous extensions due to the tardiness of the petitioner to present materials. He said that for all of the reasons that he has discussed he is requesting that the ZBA move to a final vote at tonight's hearing and deny the rezoning.

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2	Mr. Thorsland asked the Board if there were any questions for Mr. Fisher and there were none.
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4	Mr. Thorsland asked if staff had any questions for Mr. Fisher and there were none.
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6	Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Fisher and there was no one.
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8 9 10 11 12 13 14	Mr. Thorsland stated that there are three additional signatures on the witness register for tonight although if those witnesses could assure their attendance at the next public hearing regarding this case he will assure those witnesses that they will be called to testify first. He said that during the recess he polled the Board regarding an extension of the meeting and no one was in favor of such an extension. He said that the Board will need to grant a short extension to the meeting to address other matters but if Mr. Jody Eversole, Mr. William Jones, and Mr. Ben Shadwick would be able to attend the next meeting he will give them ample time to address the Board with their testimony.
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16 17	Mr. Eversole stated that he will definitely make every attempt to attend the next public hearing. He requested a continuance date.
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19	Mr. Thorsland stated that the Board will determine a continuance date shortly.
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21	Mr. Shadwick and Mr. Jones also indicated that they will be in attendance at the next meeting.
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23 24	Mr. Thorsland stated that staff has suggested that the cases be continued to the April 25 th meeting. He asked if the petitioners were available for the April 25 th meeting.
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26 27	Mr. Thorsland entertained a motion to continue Cases 687-AM-11 and 688-S-11 to the April 25, 2013, meeting.
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1	Ms. Capel moved to continue Case 687-AM-11 and 688-S-11 to the April 25, 2013, meeting.
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3 4 5	Mr. Passalacqua recommended that the petitioner and anyone else who desires to participate in these cases that they submit new information as soon as possible so that staff and the Board can review it before the meeting as opposed to digesting the information at the meeting or requiring another continuance.
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7	Mr. Miller highly agreed.
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9 10	Mr. Thorsland stated that the Board would like to review a signed document from Mr. Bragg, the farmer to the south, indicating his agreement.
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12 13 14	Mr. Singleton stated that the only information that the Board requires prior to the next meeting is the signed document from Mr. Bragg and information regarding the trees located in the hangar area. He asked if there was any further information required by staff or the Board at this time.
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16	Mr. Palmgren seconded Ms. Capel's motion. The motion carried by voice vote.
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