

APPENDIX A
PUBLIC AND AGENCY LETTERS
AND CONSULTATION

APPENDIX A.

Public and Agency Letters and Consultation

Scoping letters were sent in August 2001 to federal, state, and local agencies, nearby cities, and tribal organizations soliciting their concerns regarding the Description of the Proposed Action and Alternatives (DOPAA). (The accompanying DOPAA contained information found in Chapters 1 and 2 of this EA.)

In May 2002, the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) were sent to the same agencies for review, and copies were sent to the Glendale, Surprise, and Litchfield Public Libraries for public review. Copies of an Expanded Executive Summary (see Appendix C) were sent to all tribal organizations on the Luke AFB mailing list for their review. A Notice of Availability was published in the *Arizona Republic* on May 22, 2002 announcing a public comment period from that date through June 21, 2002. The notice and transmittal letters contained a privacy advisory telling potential commentors that the addresses of private citizens would not be published in the final EA.

This Appendix contains the mailing list of agencies and organizations to whom the letters, DOPAA, EA (or Expanded Executive Summary), and FONSI were sent, sample copies of the DOPAA and EA/FONSI transmittal letters, copies of response letters or transcribed telephone comments, and a copy of the Notice of Availability. The Expanded Executive Summary sent to tribal organizations is found in Appendix C.

Table A-1 lists the response letters in the order in which they are presented in the appendix and the number assigned to each letter.

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Scoping Responses, Notice of Availability, and Public Comments		
<i>Number</i>	<i>Agency or Organization</i>	<i>Date of Response</i>
Responses to Scoping Letter and DOPAA		
1.	U.S. Department of the Interior, Bureau of Land Management, Phoenix Field Office	August 16, 2001
2.	City of Litchfield Park, AZ, Planning Office (<i>by telephone</i>)	August 15, 2001
3.	The Cocopah Indian Tribe	August 17, 2001
4.	Fort Mojave Indian Tribe, Ahamakav Cultural Society	Letter undated; faxed on August 30, 2001
5.	The Hopi Tribe, Cultural Preservation Office	August 27, 2001
6.	City of Avondale, AZ Development Services Department, Planning Division	August 28, 2001
7.	Arizona Game and Fish Department	August 29, 2001
8.	City of Glendale, AZ, Planning Department	September 11, 2001
9.	Tohono O'odham Nation Office of the Public Safety Director (<i>by telephone</i>)	September 17, 2001
Notice of Availability of Draft EA and Draft FONSI		
10.	Notice of Availability, <i>Arizona Republic</i>	Published May 22, 2002
Public Comments on Draft EA and Draft FONSI, and Responses		
11.	The Cocopah Indian Tribe Response: None necessary	May 28, 2002
12.	Stephen and Heather Murphy Response: None necessary	June 2, 2002
13.	Fort Mojave Indian Tribe, Ahamakav Cultural Society Response: None necessary	June 3, 2002
14.	City of Surprise, AZ, City Manager's Office Response: The purpose of this EA was to address changes in the predominant direction of arrivals and departures, and other operational changes, at Luke AFB. Changes in the location of flight tracks for training and other purposes were not part of the Proposed Action or an alternative in this document. Your suggested change in flight tracks is not within the scope of this EA, and future changes in flight tracks would be addressed in separate environmental documents.	June 13, 2002
15.	City of Peoria, AZ, Office of the Community Development Director Response: None necessary	June 14, 2002
16.	City of Glendale, AZ, Office of the Mayor Response: None necessary	June 20, 2002



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

10 Aug 01

Jeff Rothrock
Environmental Flight
13970 W Lightning St
Luke AFB AZ 85309

Mr. Jon Froke
Planning Director, City of Glendale
5850 W. Glendale Avenue
Glendale, AZ 85301

Dear Mr. Froke:

The U.S. Air Force plans to prepare an Environmental Assessment to assess the potential environmental impacts of a proposed action at Luke Air Force Base (AFB), Arizona. The action includes the permanent implementation of recent temporary changes to flight operations, the shift of some flight operations to nighttime, and a small increase in the number of student pilots at the base. The attached Description of the Proposed Action and Alternatives (DOPAA) provides details of the action, explains the purpose and need for the action, and discusses alternatives to the action.

According to the National Environmental Policy Act (NEPA), the Air Force must assess the potential environmental impacts of the proposed and alternative actions. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, the Air Force is requesting input from other federal, state, and local agencies on the proposal. Please identify any resources within your agency's purview that may be potentially impacted. Maps and graphics are included within the DOPAA to assist your office in reviewing the proposal.

Please provide any comments or information by September 7, 2001. Responses should be sent directly to:

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Your assistance in providing information is greatly appreciated. If you have any questions, please call Mr. Rothrock at (623) 856-3832, extension 224.

Sincerely,

A handwritten signature in cursive script that reads "Timothy G. Imdieke".

TIMOTHY G. IMDIEKE, Capt, USAF
Commander, Environmental Flight

Attachment:
Description of the Proposed Action and Alternatives

This page intentionally left blank.

Mailing List of Governmental Agencies and Libraries

Agencies:

Field Supervisor
US Fish and Wildlife Service
Ecological Services Office
2321 Royal Palm Road, Suite 103
Phoenix, AZ 85021

Mr. Gene Dahlem
Phoenix Field Office,
US Bureau of Land Management
21605 N 7th Ave
Phoenix, AZ 85027

Ms Sabra Schwartz
Heritage Data Management System Coordinator
State of Arizona Game and Fish Department
2221 W. Greenway Road
Phoenix, AZ 85032-4399

Ms Joy Rich
Planning & Development
Maricopa County
411 N. Central, 3rd Floor
Phoenix, AZ 85004

Mr. Felipe Zubia
Development Services Director,
City of Avondale
1211 S. 4th Street
Avondale, AZ 85323

Mr. Joe Blanton
Town Manager, Town of Buckeye
100 N. Apache, Suite A
Buckeye, AZ 85326

Ms Shirley Berg
Assistant Manager, City of El Mirage
14405 N. Palm St.
El Mirage, AZ 85335

Mr. Jon Froke
Planning Director, City of Glendale
5850 W. Glendale Avenue
Glendale, AZ 85301

Mr. Harvey Krauss
Community Development Director, City of
Goodyear
119 N. Litchfield Road
Goodyear, AZ 85338

Mr. Mike Cartsonis
Planning Director, City of Litchfield Park
214 W. Wigwam Blvd.
Litchfield Park, AZ 85340

Ms Debra Stark
Director of Development Services, City of Peoria
8401 W. Monroe Street
Peoria, AZ 85345

Mr. Phil Testa
Community Services Director, City of Surprise
12425 W. Bell Road
Surprise, AZ 85374

Ms Petra Mendez
Town Clerk, Town of Youngtown
12030 Clubhouse Square
Youngtown, AZ 85363

Libraries:

Glendale Public Library
Head Librarian
5959 W. Brown St.
Glendale, AZ 85302

Surprise Library
Head Librarian
15844 N. Hollyhock
Surprise, AZ 85374

Litchfield Park Branch Library
Head Librarian
101 W. Wigwam Blvd
Litchfield Park, AZ 85340

Mailing List of Tribal Organizations

Chairman Delia Carlyle
Ak-Chin Indian Community
42507 West Peters and Nall Road
Maricopa, AZ 85239

Ms Elaine Peters
Ak-Chin Him Dak Eco Museum & Archives
47685 N. Eco Museum Road
Maricopa, AZ 85239

Mr. Jon Schumacher
Ak-Chin Him Dak Eco Museum & Archives
47685 N. Eco Museum Road
Maricopa, AZ 85239

Mr. Gilbert Pablo
Campo Environmental Protection Agency
36190 Church Road, Suite 4
Campo, CA 91906

Chairman Tito Smith
Chemehuevi Tribe
P. O. Box 1976
1990 Palo Verde Drive
Havasu Lake, CA 92363

Ms Lynn Petach
Chemehuevi Tribe
19220 Cantara Street
Reseda, CA 91335-1114

Chairman Sherry Cordova
Cocopah Tribe
County 15 and Ave G
Somerton, AZ 85350

Ms Lisa Wanstall
Cocopah Museum
County 15 and Ave G
Somerton, AZ 85350

Mr. Billy White
Cocopah Museum
County 15 and Ave G
Somerton, AZ 85350

Chairman Daniel Eddy, Jr.
Colorado River Indian Tribes
Route 1, Box 23-B
Parker, AZ 85344

Ms Betty Cornelius
Colorado River Indian Tribal Museum
Route 1, Box 23-B
Parker, AZ 85344

Mr. Weldon Johnson
Colorado River Indian Tribes
Route 1, Box 23-B
Parker, AZ 85344

President Clinton Pattea
Fort McDowell Yavapai Nation
P. O. Box 17779
Fountain Hills, AZ 85269

Ms Marcy-Jean Mattson
Fort McDowell Yavapai Nation
P. O. Box 17779
Fountain Hills, AZ 85269

Chairman Nora Helton
Fort Mohave Indian Tribe
500 Merriman Avenue
Needles, CA 92363

Ms Elda Butler
Aha Makav Cultural Society
Fort Mohave Indian Tribe
1909 Smokestack Drive
Needles, CA 92363

Mr. Chad Smith
Aha Makav Cultural Society
Fort Mohave Indian Tribe
P. O. Box 5990, 10225 Harbor Ave
Mojave Valley, AZ 86440

President Mike Jackson, Sr.
Fort Yuma-Quechan Tribe
P.O. Box 1899
Yuma, AZ 85366-1899

Ms Pauline Owl
Cultural Committee
Fort Yuma-Quechan Tribe
P.O. Box 1899
Yuma, AZ 85366-1899

Governor Donald R. Antone, Sr.
Gila River Indian Community
P.O. Box 97, 315 W. Casa Blanca Road
Sacaton, AZ 85247

Mr. Adrian Hendricks
Cultural Committee
Gila River Indian Community
P.O. Box E 192, South Skill Center Road, #200
Sacaton, AZ 85247

Mr. Barnaby Lewis
Cultural Resources Management Program
Gila River Indian Community
P. O. Box 2140
192 South Skill Center Road, #300
Sacaton, AZ 85247

Chairman Augustine Hanna
Havasupai Tribe
P. O. Box 10, 10 Main Street
Supai, AZ 86435

Mr. Roland Manakaja
Havasupai Tribe
P. O. Box 10, 10 Main Street
Supai, AZ 86435

Ms Lorraine Eiler
Hia C-ed O'odham Alliance
4739 W. Hayward
Glendale, AZ 85301

Chairman Wayne Taylor, Jr.
Hopi Tribe
P. O. Box 123
Hohnanhi Building, Main Street
Kykotsmovi, AZ 86039

Mr. Leigh Kuwanwisiwma
Hopi Cultural Preservation Office
Hopi Tribe
P.O. Box 123
Hohnanhi Building, Main Street
Kykotsmovi, AZ 86039

Mr. Kurt Dongoske
Hopi Cultural Preservation Office
Hopi Tribe
P. O. Box 123
Hohnanhi Building, Main Street
Kykotsmovi, AZ 86039

Chairman Louise Benson

Hualapai Tribe
P. O. Box 179, 215 Diamond Creek Road
Peach Springs, AZ 86434-0179

Mr. Monza Honga
Office of Cultural Resources, Hualapai Tribe
P. O. Box 179, 215 Diamond Creek Road
Peach Springs, AZ 86434-0179

Chairman Carmen Bradley
Kaibab Band of Paiute Indians
HC 65, Box 2
Fredonia, AZ 86022

Ms Brenda Drye
Cultural Resources Office
Kaibab Band of Paiute Indians
HC 65, Box 2
Fredonia, AZ 86022

Ms Vivienne-Caron Jake
NAGPRA Coordinator, Kaibab Band of Paiute
Indians
HC 65, Box 3
Fredonia, AZ 86022

President Ivan Makil
Salt River Pima-Maricopa Indian Community
10005 E. Osborn Road
Scottsdale, AZ 85256

Mr. Ron Chiago
Environmental/Cultural Department
Salt River Pima-Maricopa Indian Community
10005 E. Osborn Road
Scottsdale, AZ 85256

Ms Cari Kreshak
Environmental/Cultural Department
Salt River Pima-Maricopa Indian Community
10005 E. Osborn Road
Scottsdale, AZ 85256

Chairman Raymond Stanley, Jr.
San Carlos Apache Tribe
P.O. Box O, Tonto Street, House 35
San Carlos, AZ 85550

Mr. Harrison Talgo, Sr.
San Carlos Apache Tribe
P. O. Box O
San Carlos, AZ 85550

Ms Vernelda J. Grant
Historic Preservation and Archaeology Dept.

San Carlos Apache Tribe
P O Box O
San Carlos, AZ 85550

Ms Jeanette Cassa
Elder's Cultural Advisory Council
c/o Forest Resources Program, San Carlos
Apache Tribe
P.O. Box O
San Carlos, AZ 85550

Chairman Edward Manuel
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
Sells, AZ 85634

Mr. Marco Rivera
Executive Office
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
Sells, AZ 85634

Mr. Dennis Ramon
Tohono O'odham Legislative Branch
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
Sells, AZ 85634

Mr. Tony Burrell
Cultural Preservation Committee
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
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Mr. Peter L. Steere
Cultural Affairs Department
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
Sells, AZ 85634

Mr. Joseph T. Joaquin
Cultural Affairs Department
Tohono O'odham Nation
P.O. Box 837, Main Street, Bldg. 49
Sells, AZ 85634

Chairman Ronald Ventura
Baboquivari District
Tohono O'odham Nation
P. O. Box 3001, Rt 19, Milepost 17.5
Sells, AZ 85634
Chairman Marilyn R. Francisco
Chukut Kuk District
Tohono O'odham Nation

P. O. Box 278, Main Street, Bldg. 49
Sells, AZ 85634

Chairman Percy Lopez
Gu-Achi District
Tohono O'odham Nation
HCR 713 HCO 2 Box 713
Sells, AZ 85634

Chairman William Lewis, Sr.
Gu Vo District
Tohono O'odham Nation
P. O. Box 880, Rt 1, GuVo District Office
Ajo, AZ 85321

Chairman Manuel Osequeda, Jr.
Hickiwan District
Tohono O'odham Nation
HC 03 Box 873
Ajo, AZ 85321

Chairman Ernestine G. Marquez
San Lucy District
Tohono O'odham Nation
P. O. Box GG, 1216 N 307th Ave.
Gila Bend, AZ 85337

Chairman Austin Nunez
San Xavier District
Tohono O'odham Nation
2018 W. San Xavier Road
Tucson, AZ 85746

Chairman Joseph Nelson Juan
Schuk Toak District
Tohono O'odham Nation
P. O. Box 368, Hwy 86, Milepost 26.5
Sells, AZ 85634

Chairman Norbert Manuel
Sells District
Tohono O'odham Nation
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Sells, AZ 85634

Chairman Nina Jose
Sif Oidak District
Tohono O'odham Nation
P. O. Box 12038
Casa Grande, AZ 85222

Chairman Stanley Cruz
Pisinemo District
Tohono O'odham Nation
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Mr. Leroy J. Juan
Hia Ced O'odham Program
Tohono O'odham Nation
P.O. Box 837
Sells, AZ 85634

Ms Lena Enas
Hia Ced O'odham Program
Tohono O'odham Nation
P.O. Box 837
Sells, AZ 85634

Chairman Vivian L. Burdette
Tonto Apache Tribe
Tonto Apache Reservation #30
Payson, AZ 85541

Chairman Mary Velardo
Torres Martinez Desert Cahuilla Indians
P. O. Box 1160, 66725 Martinez Road
Thermal, CA 92274

Mr. George Aclair
Torres Martinez Desert Cahuilla Indians
P. O. Box 1160
Thermal, CA 92274

Mr. Pat Galaz
Torres Martinez Desert Cahuilla Indians
P. O. Box 1160
Thermal, CA 92274

Chairman Dallas Massey, Sr.
White Mountain Apache Tribe
P.O. Box 1150
Whiteriver, AZ 85941

Mr. Ramon Riley
Heritage Program
White Mountain Apache Tribe
P.O. Box 507
Ft. Apache, AZ 85926

Dr. John Welch
Heritage Program, White Mountain Apache Tribe
P.O. Box 507
Ft. Apache, AZ 85926
Chairman Vincent Randall

Yavapai-Apache Nation
P. O. Box 1188, 200 W. Datsi
Camp Verde, AZ 86322

Mr. Christopher Coder
Cultural Resources, Yavapai-Apache Nation
P. O. Box 1188, 200 W. Datsi
Camp Verde, AZ 86322

Ms Katherine Marquez
Yavapai Cultural Preservation
Yavapai-Apache Nation
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Clarkdale, AZ 86324

Ms Rebeka Smith
Apache Cultural Preservation
Yavapai-Apache Nation
P. O. Box 1143, 200 W. Datsi
Clarkdale, AZ 86324

President Stan Rice, Jr.
Yavapai-Prescott Indian Tribe
530 East Merritt Street
Prescott, AZ 86301

Ms Nancy Hayden
Cultural Research Committee
Yavapai-Prescott Indian Tribe
530 East Merritt Street
Prescott, AZ 86301

Ms Linda Blan
Yavapai-Prescott Indian Tribe
530 East Merritt Street
Prescott, AZ 86301

Governor Malcolm Bowekaty
Pueblo of Zuni
P. O. Box 339, 1203 B, Hwy 63
Zuni, NM 87327-0339

Mr. Jonathan Damp
Zuni Cultural Resources Enterprise
Office Pueblo of Zuni
P. O. Box 1149, 22 B Ave.
Zuni, NM 87327-0339

Mr. Philbert Soroquisara
District 7 Council Representative
P. O. Box 97
Sacaton, AZ 85247

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United States Department of the Interior

①

BUREAU OF LAND MANAGEMENT

Phoenix Field Office
21605 North 7th Avenue
Phoenix, AZ 85027

IN REPLY REFER TO:
1792 (020)

August 16, 2001

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Dear Mr. Rothrock:

We appreciate the opportunity to provide comments on the Preliminary Final Description of the Proposed Action and Alternatives for the Environmental Assessment Proposed Changes in Flight Operations, dated July 2001.

All of the activities described in the Proposed Action and Alternatives will occur in the immediate vicinity of Luke Air Force Base (AFB) in Glendale. The Bureau of Land Management administers little land in that vicinity and thus will not be directly impacted by the proposed changes. However, an indirect effect from aircraft going to or from the Goldwater Range will be increased weekend and night flight activity over the various designated wilderness areas south of Luke AFB, as well as over the Sonoran Desert National Monument. This increased weekend activity coincides with the days when we have the most visitors to both the Monument and the wilderness areas. Those visitors, and others camping overnight in the areas, would be impacted to some small degree by the noise associated with the increased weekend and/or night flights. While the Air Force's continued use of the air space over the wilderness areas and the Monument is assured by law and proclamation (Desert Wilderness Act of 1990 and the Sonoran Desert National Monument Proclamation), the impact to the visitors' activities from the military actions should be acknowledged. We would appreciate it if this impact were discussed in the environmental impacts section of the Environmental Assessment.

Again, thank you for the opportunity to comment on the draft document. If you have any questions regarding these comments, please contact Gene Dahlem at (623) 580-5525 or via e-mail at gene_dahlem@blm.gov.

Sincerely,

Michael A. Taylor
Field Manager

②

**Telephone Comments
Mr. Mike Cartsonis
Planning Director, City of Litchfield Park
Litchfield Park, AZ 85340**

August 15, 2001

Mention that less density in development would mitigate noise complaints.

Add a 55 dB noise contour; noise complaints typically come from outside the 65 dB contour.



THE COCOPAH INDIAN TRIBE

③

COCOPAH TRIBAL OFFICE

County 15th & Avenue G
Somerton, Arizona 85350

Telephone: (520) 627-2102 or 627-2061
Fax: (520) 627-3173

Friday, August 17, 2001

Mr. Jeff Rothrock
Environmental Flight
13970 W. Lightning St.
Luke AFB, AZ 85309

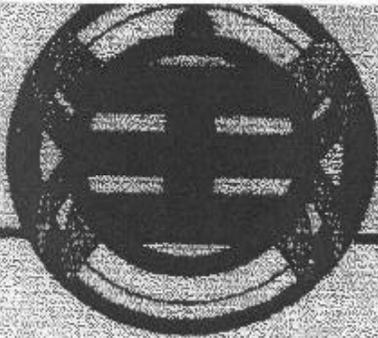
Mr. Rothrock,

Thank you for your consideration in sending your Environmental Assessment of the proposed operations changes at Luke Air Force Base. At this time these changes will not impact the Cocopah Tribe. Please continue to keep us informed of any future proposed changes.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry Cordova".

Sherry Cordova, Chairperson
Cocopah Indian Tribe



AHAMAKAV CULTURAL SOCIETY

Fort Mojave Indian Tribe

4

P.O. 5990 MOHAVE VALLEY, AZ 86440 (520)768-4475

Jeff Rothrock
56 CES/CEV
13970 W. Lightning St.,
Luke AFB, AZ 85309-1148

RE: Luke AFB Environmental Assessment, Proposed Changes in
Flight Operations

Dear Mr. Rothrock:

The Ahamakav Cultural Society, which is the Historic and Cultural Preservation Office of the Fort Mojave Tribe, has received and reviewed the subject document, and we find that cultural resources important to the Fort Mojave Tribe will not be affected by the formalization of the changes in flight patterns.

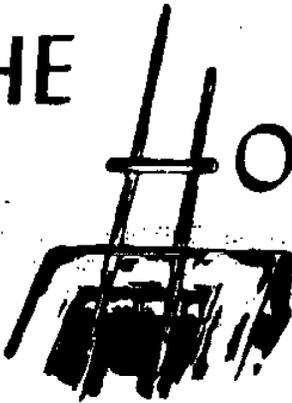
If you have any questions, call us at (928)-768-4475.

Sincerely,

Chad Smith, Tribal Archeologist,
Cultural Resource Manager

cc: Eida Butler, Director, Ahamakav Cultural Society
Nora Helton, Tribal Chairperson

THE



HOPI TRIBE

5

Wayne Taylor, Jr.
CHAIRMAN

Phillip R. Quochoytewa, Sr.
VICE-CHAIRMAN

August 27, 2001

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lightning Street
Luke AFB, Arizona 85309-1149

Dear Mr. Rothrock,

This letter is in response to the correspondence from Capt. Timothy G. Imdieke, Commander, Environmental Flight, to Chairman Taylor, dated August 10, 2001, regarding the U.S. Air Force's plans to prepare an Environmental Assessment to assess the potential environmental impacts of the permanent implementation of recent temporary changes to flight operations, the shift of some flight operations to nighttime, and a small increase in the number of student pilots at the base.

The Hopi Cultural Preservation Office has reviewed the enclosed document titled *Luke AFB, Arizona, Environmental Assessment, Proposed Changes in Flight Operations, Preliminary Final Description of the Proposed Action and Alternatives*. Although we don't understand the meaning of "Preliminary Final Description," because the proposed action will apparently not affect cultural resources, we have no concerns regarding this proposal.

If you have any questions or need additional information, please contact Terry Morgart at the Cultural Preservation Office at 520-734-3767. Thank you for your consideration.

Respectfully,

Leigh J. Kuwanwisiwma, Director
Cultural Preservation Office

cc: Office of the Chairman



Development Services Department
Planning Division
1211 South Fourth Street, Avondale, Arizona 85323
Phone: (623) 932-6088 Fax: (623) 932-6119

⑥

August 28, 2001

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lightning Street
Luke AFB, Arizona 85309-1149

Re: Description of Proposed Action and Alternatives

Dear Mr. Rothrock:

Thank you for the information forwarded on the proposed action at Luke Air Force Base. At the present time, we have no comments regarding the above-referenced project.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Felipe A. Zubia'.

Felipe A. Zubia, AICP
Director
Development Services

FAZ:rm



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4399
(602) 942-3000 • WWW.AZGF.D.GUM

GOVERNOR
JANE DEE HULL
COMMISSIONERS
CHAIRMAN, DENNIS D. MANNING, ALPINE
MICHAEL M. GOLIGHTLY, FLAGSTAFF
JOE CARTER, SAFFORD
SUSAN E. CHILYON, ARIZONA
W. HAYS GILSTRAP, PHOENIX
DIRECTOR
DUANE L. SHROUTE
DEPUTY DIRECTOR
STEVE K. FERRILL



August 29, 2001

7

Mr. Jeff Rothrock
56 CES/CEV
13970 W. Lightning St.
Luke AFB, AZ 85309-1149

Re: Special Status Species Information for Luke Air Force Base, Changes in Flight Directions and Number of Flights and Students.

Dear Mr. Rothrock:

The Arizona Game and Fish Department (Department) has reviewed your letter, dated August 22, 2001, regarding special status species information associated with the above-referenced project area. The Department's Heritage Data Management System (HDMS) has been accessed and current records do not indicate the presence of any special status species as occurring in the project vicinity. In addition, this project does not occur in the vicinity of any proposed or designated Critical Habitats.

The Department's HDMS data are not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity.

Making available this information does not substitute for the Department's review of project proposals, and should not decrease our opportunities to review and evaluate new project proposals and sites. The Department is also concerned about other resource values, such as other wildlife, including game species, and wildlife-related recreation. The Department would appreciate the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with project activities occurring in the subject area, when specific details become available.

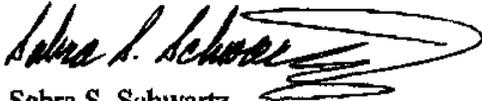
Mr. Jeff Rothrock

August 29, 2001

2

If you have any questions regarding this letter, please contact me at (602) 789-3618. General status information and county distribution lists for special status species are also available on our web site at http://www.azgfd.com/frames/fishwild/hdms_site/Home.htm.

Sincerely,



Sabra S. Schwartz
Heritage Data Management System, Coordinator

SSS:ss

cc: Bob Broscheid, Project Evaluation Program Supervisor
Russ Haughey, Habitat Program Manager, Region VI
Russ Engel, Habitat Program Manager, Region IV

AGFD# 08-27-01 (05)



8

September 11, 2001

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lighting
Luke AFB, AZ 85309

RE: Environmental Assessment Proposed Changes in Flight Operations- Luke AFB

Dear Mr. Rothrock:

We have reviewed your assessment regarding proposed changes in flight operations for Luke Air Force Base.

We support your conclusions and the move to change the predominant direction of takeoff. The potential increase in training activities makes it important that these changes be made as soon as possible.

As indicated in your report the proposed changes represent the appropriate action to address long-term safety concerns for both aircraft and residents.

Should you have any questions please call me at (623) 930-2800.

Sincerely,

Jon M. Froke
Planning Director
Planning Department

cc: Amy Rudibaugh-Duffy, Intergovernmental Relations

022_004

**Telephone Comments
Mr. Rick Clifton
Public Safety Director
Tohono O'odham Nation
September 17, 2001**

Mr. Clifton inquired if the increased night operations would mean increased night flights over the Nation?

(Note: Mr. Clifton was referred to Mr. Terry Hanson of the Luke AFB Range Management Office for clarification of this issue.)

**NOTICE OF AVAILABILITY
Draft Environmental Assessment
And Draft Finding of No Significant Impact
Changes in Flight Operations
Luke AFB, Arizona**

An Environmental Assessment (EA) has been prepared in accordance with the *National Environmental Policy Act* (NEPA) of 1969 and Council on Environmental Quality and Air Force regulations implementing NEPA to analyze the potential environmental consequences of changes in flight operations at Luke AFB. The Air Force proposes to permanently implement temporary changes in the direction of arrivals and departures; occasionally shift some weekday operations to Saturday; shift a small number of operations from daytime to nighttime (although few flights would occur after 10:00 p.m.); and increase the number of student pilots at Luke AFB. The total number of flight operations would not change.

The EA analyzes potential impacts from the operational changes to aircraft operations and safety; air quality; biological resources; noise and land use; socioeconomics; and environmental justice. An Implementation Alternative and a No Action Alternative were also analyzed in the EA. The Draft EA and Draft Finding of No Significant Impact, dated May 2002, are available for review at the following locations:

Glendale Public Library, 5959 W. Brown St., Glendale

Surprise Library, 15844 N. Hollyhock, Surprise

Litchfield Park Library, 101 W. Wigwam Blvd, Litchfield Park

Privacy Advisory: Your comments on this Draft EA are requested. Letters or other written comments provided may be published in the Final EA. Comments will normally be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed; personal home addresses and phone numbers will not be published in the Final EA.

Public comments on the EA will be accepted through June 21, 2002. Written comments and inquiries on the EA should be directed to:

Mr. Jeff Rothrock, 56 CES/CEV, 13970 West Lightning Street, Luke AFB, AZ 85309-1149.

Fax: 623-856-3817.

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DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

20 May 02

Timothy G. Imdieke, Capt, USAF
Environmental Flight
13970 W Lightning St
Luke AFB AZ 85309

Mr. Jon Froke
Planning Director, City of Glendale
5850 W. Glendale Avenue
Glendale, AZ 85301

Dear Mr. Froke:

The U.S. Air Force has prepared an Environmental Assessment (EA) to assess the potential environmental impacts of proposed changes in flight operations at Luke Air Force Base (AFB), Arizona. The need for the proposed action is to meet changed military training requirements. The action includes permanent implementation of recent temporary changes to flight operations, the shift of some flight operations to nighttime (although few flights would occur after 10:00 p.m.), occasional shifts of weekday operations to Saturday, and a small increase in the number of student pilots at the base. The total number of flight operations at Luke AFB would not change. The EA provides details of the action, explains the purpose and need for the action, and assesses potential impacts of the proposed action and alternatives.

According to the *National Environmental Policy Act*, the Air Force must assess the potential environmental impacts of the Proposed Action. In accordance with Executive Order 12372, *Inter-governmental Review of Federal Programs*, the Air Force is requesting input from other federal, state, and local agencies and from the public on the Draft EA, which is attached along with a Draft Finding of No Significant Impact. A notice of the availability of these documents is scheduled to appear in the West Valley editions of the *Arizona Republic* on Wednesday, May 22, 2002. The 30-day comment period extends until June 21, 2002.

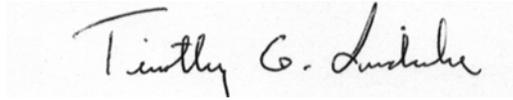
Privacy Advisory: Your comments on this Draft EA are requested. Letters or other written comments provided may be published in the Final EA. Comments will normally be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed; personal home addresses and phone numbers will not be published in the Final EA.

Please provide any comments by June 21, 2002. Responses should be sent directly to:

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Your assistance in providing comments is greatly appreciated. If you have any questions, please call Mr. Rothrock at (623) 856-3832, extension 224.

Sincerely,

A handwritten signature in black ink on a light-colored background. The signature reads "Timothy G. Indieke" in a cursive script.

TIMOTHY G. IMDIEKE, Capt, USAF
Commander, Environmental Flight

Attachments:

Draft Environmental Assessment; Draft Finding of No Significant Impact



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

20 May 02

Timothy G. Imdieke, Capt, USAF
Environmental Flight
13970 W Lightning St
Luke AFB AZ 85309

Glendale Public Library
Attention: Head Librarian
5959 W. Brown St.
Glendale, AZ 85302

Dear Sir or Madam:

The U.S. Air Force has prepared an Environmental Assessment (EA) to assess the potential environmental impacts of proposed changes in flight operations at Luke Air Force Base (AFB), Arizona. The need for the proposed action is to meet changed military training requirements. The action includes permanent implementation of recent temporary changes to flight operations, the shift of some flight operations to nighttime (although few flights would occur after 10:00 p.m.), occasional shifts of weekday operations to Saturday, and a small increase in the number of student pilots at the base. The total number of flight operations at Luke AFB would not change. The EA provides details of the action, explains the purpose and need for the action, and assesses potential impacts of the proposed action and alternatives.

According to the *National Environmental Policy Act*, the Air Force must assess the potential environmental impacts of the Proposed Action. In accordance with Executive Order 12372, *Inter-governmental Review of Federal Programs*, the Air Force is requesting input from other federal, state, and local agencies and from the public on the Draft EA, which is attached along with a Draft Finding of No Significant Impact. A notice of the availability of these documents at this library is scheduled to appear in the West Valley editions of the *Arizona Republic* on Wednesday, May 22, 2002. Please make the documents available for public review during the 30-day comment period (May 22-June 21, 2002).

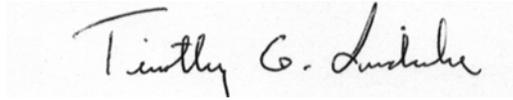
Privacy Advisory to Those Wishing to Comment: Your comments on this Draft EA are requested. Letters or other written comments provided may be published in the Final EA. Comments will normally be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed; personal home addresses and phone numbers will not be published in the Final EA.

Please provide any comments by June 21, 2002. Responses should be sent directly to:

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Your assistance in providing comments is greatly appreciated. If you have any questions, please call Mr. Rothrock at (623) 856-3832, extension 224.

Sincerely,

A handwritten signature in black ink on a light-colored background. The signature reads "Timothy G. Indieke" in a cursive script.

TIMOTHY G. IMDIEKE, Capt, USAF
Commander, Environmental Flight

Attachments:

Draft Environmental Assessment; Draft Finding of No Significant Impact



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

20 May 2002

Timothy G. Indieke, Capt, USAF
Environmental Flight
13970 W Lightning St
Luke AFB AZ 85309

Chairman Delia Carlyle
Ak-Chin Indian Community
42507 West Peters and Nall Road
Maricopa, AZ 85239

Dear Chairman Carlyle:

The U.S. Air Force has prepared an Environmental Assessment (EA) to assess the potential environmental impacts of proposed changes in flight operations at Luke Air Force Base (AFB), Arizona. The need for the proposed action is to meet changed military training requirements. The action includes permanent implementation of recent temporary changes to flight operations, the shift of some flight operations to nighttime (although few flights would occur after 10:00 p.m.), occasional shifts of weekday operations to Saturday, and a small increase in the number of student pilots at the base. The total number of flight operations at Luke AFB would not change. The EA provides details of the action, explains the purpose and need for the action, and assesses potential impacts of the proposed action and alternatives.

According to the *National Environmental Policy Act*, the Air Force must assess the potential environmental impacts of the Proposed Action. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, the Air Force is requesting input from other federal, state, and local agencies, tribal organizations, and the public on the Draft EA. Attached is an Expanded Executive Summary, to which has been added more detailed information about the noise and land use impacts, along with tables and a color map comparing impacts by alternative. Also attached is a Draft Finding of No Significant Impact. Copies of the EA will be available during the 30-day public comment period (May 22-June 21, 2002) at the public libraries in Glendale, Surprise, and Litchfield Park.

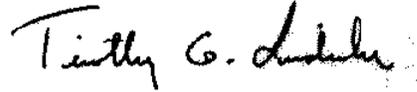
Privacy Advisory: Your comments on this Draft EA are requested. Letters or other written comments provided may be published in the Final EA. Comments will normally be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed; personal home addresses and phone numbers will not be published in the Final EA. Please indicate if the address used for comment response is a private address.

Please provide any comments by June 21, 2002. Responses should be sent directly to:

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Your assistance in providing comments is greatly appreciated. If you have any questions, please call Mr. Rothrock at (623) 856-3832, extension 224.

Sincerely,

A handwritten signature in black ink that reads "Timothy G. Indieke". The signature is written in a cursive style with a large initial 'T'.

TIMOTHY G. IMDIEKE, Capt, USAF
Commander, Environmental Flight

Attachments:

Draft Enhanced Executive Summary; Draft Finding of No Significant Impact



THE COCOPAH INDIAN TRIBE

11

COCOPAH TRIBAL OFFICE

County 15th & Avenue G
Somerton, Arizona 85350

Telephone: (928) 627-2102 or 627-2061

Fax: (928) 627-3173



May 28, 2002

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke AFB, AZ 85309-1149

Mr. Rothrock:

Thank you for asking for input to the proposed Expanded Executive Summary regarding Changes in Flight Operations at Luke AFB. At this time the Cocopah Tribe concurs in your finding of no significant impact.

If I can be of any other assistance please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry Cordova".

Sherry Cordova: Chairperson
Cocopah Indian Tribe

Stephen & Heather Murphy
❖ Peoria, AZ

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Address and telephone number
redacted in accordance with
Privacy Act requirements.

June 2, 2002

Mr. Jeff Rothrock
56 CES/CEV
13970 West Lightning Street
Luke AFB, AZ 85309-1149

RECEIVED
JUN 10 2002

Dear Mr. Rothrock:

I am writing this letter with regard to the most recent Environmental Assessment (EA) and some potential consequences to Luke AFB. I am aware of the location of the flight paths for Luke and the impact of aircraft taking off and landing at Luke because I have lived in the vicinity for over five years. I also know that when I hear F-16s in the air near my house that what I am hearing is the sound of freedom.

We, as citizens near Luke, support the base and its tremendous economic boon to the West Valley. We stand ready to support you in everything you need to do to preserve Luke AFB and its mission.

We were made aware of Luke and its flight paths prior to closing on our new home. Within the realm of reasonableness – considering Luke's mission to train the very best F-16 fighter pilots in the world – I think Luke is an excellent neighbor.

In the interest of national defense, noise and land use as well as national defense, NO actions should be taken to further hamper operations at Luke. Socioeconomics and environmental justice are important but must be considered a secondary goal when compared to the need for a superior, well-trained military force necessary to defend our freedom.

Sincerely,


Stephen and Heather Murphy



AHAMAKAV CULTURAL SOCIETY

Fort Mojave Indian Tribe

P.O. 5990 MOHAVE VALLEY, AZ 86440 (928)768-4475

13

June 3, 2002



Captain Timothy G. Imdieke
Commander, Environmental Flight
13970 Lightning St.,
Luke Air Force Base AZ 85309

Att.: Jeff Rothrock, 56th CES/CEV, Environmental Flight

RE: Proposed Changes in Flight Operations

Dear Captain Imdieke:

The AhaMakav Cultural Society, which is the Historic and Cultural Preservation Office of the Fort Mojave Tribe, has received and reviewed the subject document, and we find that our concerns have been adequately addressed.

If you have any questions, call us at (928)-768-4475.

Sincerely,

Chad Smith

Chad Smith, Tribal Archeologist,
Cultural Resource Manager

xc: Elda Butler, Director, AhaMakav Cultural Society
Nora Helton, Tribal Chairperson



THE CITY OF SURPRISE, ARIZONA

**CITY MANAGER'S OFFICE
BILL PUPO**

**12425 WEST BELL ROAD
SUITE D-100**

SURPRISE, AZ 85374

OFFICE (623) 583-1080 FAX (623) 583-1084

June 13, 2002

14

RECEIVED
JUN 18 2002

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lighting Street
Luke AFB, AZ 85309-1149

Dear Mr. Rothrock:

Thank you for the opportunity to review and provide comments on Luke AFB's *Environmental Assessment Proposed Changes in Flight Operations*.

We support the intent of the Proposed Action under which 70 to 94 percent of all flight operations would arrive and depart to the southwest, thus directing a bulk of the over-flights and related noise away from the populated northeast. However, prior to implementing the Proposed Action on a permanent basis, we request that the AFB assess the feasibility and impact of an alternative flight pattern that was not considered in the EA. Under this alternative, flight operations would be directed along the Aqua Fria River and Trilby Wash open space corridors. The advantage over the other alternatives is that these corridors will remain as permanent open space even as undeveloped lands in the West Valley come under development pressure in the next several years.

We would appreciate a written response regarding your assessment of the proposed alternative. In the meantime, we look forward to continue to work with you to insure the long-term viability of the Luke AFB. If you have any questions, please feel free to contact Phil Testa, our Community Development Director at (623) 5893-1088.

Sincerely,

Bill Pupo
City Manager

cc:
Phil Testa, Community Development Director
Mayor Joan Shafer



City of Peoria

8401 West Monroe Street, Peoria, Arizona 85345

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June 14, 2002



Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke AFB, AZ 85309-1149

RE: Comments on the Environmental Assessment and Finding of No Significant Impact (FONSI) on Proposed Changes in Flight Operations at Luke AFB Dated May 2002

Dear Mr. Rothrock:

Thank you for the opportunity to review and comment on the Environmental Assessment and FONSI identified above.

The City of Peoria provides local government services for approximately 130,000 persons, about ten percent of which live in the vicinity of Luke. No part of the City lies within the 65 L_{dn} contours of any of the alternatives being considered by the assessment. Parts of the City receive occasional flyovers from Luke aircraft.

We support the Finding of No Significant Impact for the proposed changes in flight operations. The changes will have a positive affect on areas within Peoria that lie in proximity to the base.

Should you have any questions please call me at (623) 773-7277.

Sincerely,

A handwritten signature in black ink, appearing to read "Debra Stark".

Debra Stark
Community Development Director

c: Mayor John Keegan
John Schell, Intergovernmental Affairs Manager

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ELAINE M. SCRUGGS
Mayor

16



June 20, 2002

Mr. Jeff Rothrock
56 CES/CEV, Environmental Flight
13970 West Lightning Street
Luke Air Force Base, AZ 85309-1149

Dear Mr. Rothrock:

Thank you for sending the City of Glendale the May 2002 Draft Environmental Assessment Proposed Changes in Flight Operations. Our Planning Department has carefully reviewed this document and provided the attached analysis.

We understand that the purpose of this document is to allow Luke Air Force Base to make the necessary changes in its flight operations. These changes would allow Luke Air Force Base to continue its mission and to better address safety issues.

After our review, we have determined that the Draft Environment Assessment: Proposed Changes in Flight Operations at Luke Air Force Base, Arizona report would not have a negative impact on the City of Glendale.

Thank you again for this opportunity to make comments on this important document.

Sincerely,

A handwritten signature in cursive script that reads "Elaine M. Scruggs".

Elaine M. Scruggs
Mayor



Planning Department

DATE: June 13, 2002

TO: Amy Rudibaugh-Duffy
Intergovernmental Relations Director

FROM: Ronald N. Short, FAICP
Long Range Planning Manager 

**SUBJECT: REVIEW OF DRAFT ENVIRONMENTAL ASSESSMENT: PROPOSED
CHANGES IN FLIGHT OPERATIONS AT LUKE AFB ARIZONA**

The Planning Department received a copy of the **Draft Proposed Changes in Flight Operations at Luke AFB Arizona** publication.

Purpose of the Document

Luke AFB wishes to make changes to its flight operations and to do so requires an environmental assessment and Finding of No Significant Impact (FONSI) in accordance with the *National Environmental Policy Act of 1969, the Air Force Environmental Impact Analysis Process (32 CFR 989) and the Council on Environmental Quality regulations (40 Code of Federal Regulations (CFR) 1500-1508).*

Why Make Changes to Luke's Flight Operations?

- Takeoffs and landings into the wind are preferred for all aircraft for aerodynamic and safety reasons. Luke AFB aircraft in the past took off and departed from the northeast. Prevailing daytime winds are from the southwest most of the year, requiring that Luke AFB aircraft take off and land to the southwest when prevailing winds are from the southwest.
- The Special Use Airspace used for the 56 Fighter Wing training is near capacity and Luke AFB aircraft are near the maximum utilization rate. There is little unused time available in the flight training schedule. Weather can prevent scheduled weekday flights. This means training requirements cannot be accomplished without scheduling Saturday flights.
- Changes in warfare and new technology have increased demand for pilots with night vision goggles training.
- Aircraft carrying live ordnance are prohibited from using Runways 03L/03R (to the northeast) for takeoffs and landings. This is due to the land use encroachment in that area.

What changes to Luke AFB flight operations is being requested?

Luke AFB reviewed three alternatives, subject to specific criteria. The Luke AFB preferred alternative is the **Proposed Action**.

• The **PROPOSED ACTION** consist of:

- **Permanently implement changes in direction of takeoff from the northeast to the southwest for most of the flight operations.** The proposed action would make permanent the temporary changes in the predominant direction of operations that have been phased in over the past year. Until recently 70% of flights took off to the northeast. Under the Proposed Action an estimated 70-94% of Luke AFB flights would arrive and depart to the southwest. However, prevailing wind varies by season, time of day and local weather events. This means the percentage of flights to the southwest would change accordingly. Aircraft would continue to depart with tailwinds up to 10 knots to minimize noise impacts.

It is important to note that the Proposed Action does not further reduce takeoffs to the northeast. This change has already been made over the past year. The Proposed Action makes what has already been done by temporary action permanent.

Also, it is important to note that aircraft carrying live ordnance are currently prohibited from using Runways 03L/03R (to the northeast for takeoffs or landings), due to the greater population density in that direction. This practice would not change.

- **The 56th Fighter Wing would add flight operations on one Saturday per month, as needed.** The 56th Fighter Wing Saturday operations would be in addition to the current two Saturday flight operations by the 944th Fighter Wing. The 56th Fighter Wing Saturday flight operations would not increase the total Luke AFB flight operations. The Saturday flights would replace weekday flight operations that were postponed. All efforts will be made to add the flights on the same Saturday that the 944 Fighter Wing is flying, but on occasion there could be three Saturdays per month with flight operations. This action will insure a full complement of student flights.
- **The 56th Fighter Wing would shift some daytime flight operations to occur after dark.** There is a requirement to increase the number of F-16 pilots trained in the use of night vision goggles. Therefore, pilots must depart at least one hour after sunset. The night flights would occur Monday through Thursday. One flight period would occur shortly after sunset and the second period later. Each flight period would involve 10-12 aircraft. Most flights would depart before 10:00 PM and return before midnight, with a few exceptions, due to unusual

circumstances. From November through March there could be 2 flights after 10:00 PM, but no departures after 10:00 PM during other months. There would be an estimated 10 to 12 aircraft returning after 10:00 PM depending on season and time of sunset. This action will not increase the total Luke AFB flight operations. The night and Saturday flights would follow the same flight tracks and locations as existing operations, except nighttime flights tend to be at a slightly higher altitude to reduce noise impact at ground level.

- **The 56th Fighter Wing would increase the number of F-16 pilot trainees at Luke AFB.** The number of pilot trainees would increase from approximately 800 during the baseline period to 1,050. This is an increase of 250 pilot trainees. Changes in training requirements are responsible for the need to increase pilot trainees. The courses will be shorter. The total number of flight operations would not increase.

The Proposed Action would be fully implemented by September 30, 2002.

- **The Implementation Alternative**

- **This alternative would still permanently implement the temporary changes in the predominant direction of takeoff that had been phased in over the year.** The estimated percent of flights that would depart from the southwest would change from the Proposed Action 70% - 94% to 50% - 70% under the Implementation Alternative.
- **The 56th Fighter Wing would add flight operations on one Saturday per month.** This is the same as in the Proposed Action.
- **The 56th Fighter Wing would shift some daytime flight operations to occur after dark.** This is the same as the Proposed Action.
- **The 56th Fighter Wing would increase the number of F-16 pilot trainees at Luke AFB.** This is the same as the Proposed Action.

- **The No Action Alternative**

- **Cease the temporary changes that have been made and return to 70% of arrivals and departures predominately to the northeast.**
 - This alternative would create flight operation safety concerns since the takeoffs and landing would not be into the prevailing wind.
 - The Saturday operations would not occur and the Air Force student pilot training requirement would not be met at Luke AFB.
 - The night flying would not occur to the extent required and Luke AFB would not be able to meet the Air Force demand for night vision goggle training.
 - There would be no increase in student pilots assigned to Luke AFB.

- The 65ldn noise contours would extend beyond the current 1988 JLUS 65ldn noise contours.

The Environmental Assessment did consider other alternatives of:

- Extended Operational Day Alternative
- Sunday Operations Alternative
- Flight Simulator Alternative

These alternatives were rejected.

Analysis of the Proposed Action

The reasons for the Proposed Action are clear and understood.

The criteria that the Air Force used to evaluate the three alternatives are clear and reasonable, which include:

- Meet the Luke AFB Mission.
- Address public safety, pilot safety, ground safety under flight paths and presence of other aircraft in the area.
 - Takeoffs and landings should generally be into the wind.
 - Aircraft carrying live ordnance are prohibited from using Runways 03L/03R (to the northeast) for takeoffs and landings.
 - Airspace constraints due to some airspace encroachment from Phoenix-Sky Harbor International Airport. Luke AFB aircraft departing the airbase for the southern training areas must stay under 5,000 foot altitude for 18.4 statute miles (16 nautical miles) south of Luke AFB.
- An action must address noise abatement for the surrounding communities, subject to mission and safety criteria constraints.
- An action must address other operation constraints. The Special Use Airspace used by the 56th Fighter Wing is scheduled to near capacity and aircraft are at the maximum utilization rate. No aircraft will be added in the foreseeable future.

Noise Contours that would result from the various alternatives are depicted in a series of maps relating 94%, 70%, 50% flight proportions to the southwest and no action noise contours to the 1988 JLUS 65 ldn noise contours. The consequences are the 94%, 70%, 50% flight proportions to the southwest and no action flight operations would slightly extend the 65 ldn beyond the established JLUS 65 ldn noise contour. Conversely, each of the alternatives would reduce the 65 ldn from the established JLUS 65 ldn.

The 1988 JLUS 65 ldn noise contour should continue as the basis for land use planning plus any additional land use guidance due to flight paths, training patterns and the southern corridor. The

1988 JLUS 65 ldn noise contour should not be reduced based on the Proposed Action alternative. It is important to maintain the mission of Luke AFB, which could include new aircraft that would create more noise than existing aircraft and the 1988 JLUS 65 ldn would be strongly justified.

Process

An announcement of the availability of the Draft Environmental Assessment and FONSI was issued for public review with a notice published in the West Valley editions of the *Arizona Republic* on May 22, 2002. There is a 30-day public comment period, which ends on June 21, 2002. Any comments will be addressed in the Final Environmental Assessment.

The Chairman of the Environmental Protection Commission will determine whether to issue a Finding of No Significant Impact (FONSI) or to prepare an Environment Impact Statement (EIS).

Conclusion

Based on the **Draft Environment Assessment: Proposed Changes in Flight Operations at Luke AFB, Arizona** report, such proposed flight operation changes would not have a negative impact on the City of Glendale.

cc: Tim Ernster, Deputy City Manager for Community Development
Jon M. Froke, Planning Director
Dana Tranberg, Intergovernmental Relations Assistant

025_002

APPENDIX B
DATA TABLES

APPENDIX B.
Data Tables

This appendix includes detailed data tables used in assessing the impacts of the Proposed Action, Implementation Alternative, and the No Action Alternative.

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Table B-1 Population Impacts, JLUS Contour													
Census Tract	Total Popl of Census Tract	Affected Block Groups			Impacted Popl					Community	Percent by location	Percent by location off base	
		Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn	TOTAL				
506.01	6,993	2	591	375	-	-	-	-	-	Buckeye / Cnty	3.9%	6.2%	
506.02	4,838	2	20	2	-	-	-	-	-	Buckeye / Cnty	0.0%	0.0%	
508.00	6,668	2	-	-	-	-	-	-	-	El Mirage	0.0%	0.0%	
308.00	6,968	1	2,347	761	-	-	-	-	-	El Mirage	7.9%	12.5%	
		2	3,337	2,787	-	-	-	-	-	El Mirage	29.0%	45.7%	
310.05	6,458	1	30	13	-	-	-	-	-	Goodyear / Cnty	0.1%	0.2%	
		2	-	-	-	-	-	-	-	Goodyear / Cnty	0.0%	0.0%	
		3	415	225	-	-	-	-	-	Goodyear / Cnty	2.3%	3.7%	
		5	-	-	-	-	-	-	-	Goodyear / Cnty	0.0%	0.0%	
310.06	8,067	1	626	624	-	-	-	-	-	El Mirage / Cnty	6.5%	10.2%	
		2	1,194	597	-	-	-	-	-	Glendale / Cnty	6.2%	9.8%	
		3	968	863	-	-	-	-	-	Glendale / Cnty	6.9%	10.9%	
310.07	4,392	3	70	43	-	-	-	-	-	Surprise	0.4%	0.7%	
		4	7	2	-	-	-	-	-	Surprise	0.0%	0.0%	
311.00	3,851	9	3,851	3,525	-	-	-	-	-	Luke AFB	36.7%		
716.00	2,775	1	-	-	-	-	-	-	-	Youngtown / Cnty	0.0%	0.0%	
717.00	3,769	4	-	-	-	-	-	-	-	Youngtown / Cnty	0.0%	0.0%	
	54,799		13,456	9,617	-	-	-	-	-				
Onbase	3,851	28.6%	3,851	3,525	-	-	-	-	-		36.7%		
Offbase	50,948	71.4%	9,605	6,092	-	-	-	-	-		63.3%		
Total	54,799		13,456	9,617	-	-	-	-	-				

* Population of blocks in which one or more contours are present.
Population data from U.S. Census, 2001

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Table B-2. Population Impacts, No Action Alternative													
Census Tract	Total Popl of Census Tract	Affected Block Groups				Impacted Popl					Community	Percent by location	Percent by location off base
		Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn	TOTAL				
506.01	6,993	2	591	0	0	0	0	0	0	0	Buckeye / Cnty	0.0%	0.0%
506.02	4,838	2	20	0	0	0	0	0	0	0	Buckeye / Cnty	0.0%	0.0%
608.00	6,688	2	0	0	0	0	0	0	0	0	El Mirage	0.0%	0.0%
609.00	6,988	1	2347	1,050	0	0	0	0	0	1,050	El Mirage	13.0%	18.7%
		2	3337	2,986	40	0	0	0	0	3,026	El Mirage	37.6%	53.8%
610.05	6,456	1	30	6	4	0	0	0	0	10	Goodyear / Cnty	0.1%	0.2%
		2	0	0	0	0	0	0	0	0	Goodyear / Cnty	0.0%	0.0%
		3	415	0	0	0	0	0	0	0	Goodyear / Cnty	0.0%	0.0%
		5	0	0	0	0	0	0	0	0	Goodyear / Cnty	0.0%	0.0%
610.06	8,067	1	628	309	303	5	0	0	0	617	El Mirage / Cnty	7.7%	11.0%
		2	1194	358	0	0	0	0	0	358	Glendale / Cnty	4.4%	6.4%
		3	968	256	184	83	46	0	0	550	Glendale / Cnty	6.8%	9.8%
610.07	4,392	3	70	12	0	0	0	0	0	12	Surprise	0.1%	0.2%
		4	7	0	0	0	0	0	0	0	Surprise	0.0%	0.0%
611.00	3,851	9	3851	1,385	641	241	164	0	0	2,431	Luke AFB	30.2%	
716.00	2,775	1	0	0	0	0	0	0	0	0	Youngtown / Cnty	0.0%	0.0%
717.00	3,769	4	0	0	0	0	0	0	0	0	Youngtown / Cnty	0.0%	0.0%
Total	54,799		13,456	6,364	1,152	329	209	0	0	8,054			
Onbase	3,851		3,851	1,385	641	241	164	0	0	2,431			
Offbase	50,948		9,605	4,979	511	88	45	0	0	5,623			
Total	54,799		13,456	6,364	1,152	329	209	0	0	8,054			
Percent on-/off-base by contour													
Onbase	7.0%		28.6%	21.8%	55.6%	73.3%	78.5%	0.0%	0.0%	30.2%			
Offbase	93.0%		71.4%	78.2%	44.4%	26.7%	21.5%	0.0%	0.0%	69.8%			
Total	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%			
Percent by contour level for on- and off-base													
			Onbase	57.0%	28.4%	9.9%	6.7%	0.0%	0.0%	100.0%			
			Offbase	88.5%	3.1%	1.6%	0.8%	0.0%	0.0%	100.0%			
			Total	79.0%	14.3%	4.1%	2.6%	0.0%	0.0%	100.0%			

Table B-3. Population Impacts, 94-96 Contour Set												
Census Tract	Total Popl of Census Tract	Affected Block Groups		Impacted Popl						TOTAL	Community	
		Block Group	Popl of Block Group	85 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn				
508.01	6,993	2	591	-							-	Buckeye / Cnty
508.02	4,938	2	20	-							-	Buckeye / Cnty
608.00	6,668	2	-	-							-	El Mirage
609.00	6,988	1	2,347	-							-	El Mirage
		2	3,337	-							-	El Mirage
610.05	6,458	1	30	6	5	4					15	Goodyear / Cnty
		2	-	-							-	Goodyear / Cnty
		3	415	-							-	Goodyear / Cnty
		5	-	-							-	Goodyear / Cnty
610.06	8,067	1	626	32	-	-					32	El Mirage / Cnty
		2	1,194	-	-	-					-	Glendale / Cnty
		3	968	252	95	61	15				423	Glendale / Cnty
610.07	4,392	3	70	-							-	Surprise
		4	7	-							-	Surprise
611.00	3,851	9	3,851	537	350	191	14				1,092	Luke AFB
716.00	2,775	1	-	-							-	Youngtown / Cnty
717.00	3,769	4	-	-							-	Youngtown / Cnty
Total	54,799		13,456	827	450	256	29				1,562	
Onbase	3,951		3,951	537	350	191	14				1,092	
Offbase	50,948		9,605	290	100	65	15				470	
Total	54,799		13,456	827	450	256	29				1,562	
Percent on-/off-base by contour												
Onbase	7.0%		28.6%	64.9%	77.8%	74.6%	48.3%	0.0%			69.9%	
Offbase	93.0%		71.4%	35.1%	22.2%	25.4%	51.7%	0.0%			30.1%	
Total	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	0.0%			100.0%	
Percent by contour level for on- and off-base												
Onbase			49.2%	32.1%	17.5%	1.3%	0.0%				100.0%	
Offbase			61.7%	21.3%	13.8%	3.2%	0.0%				100.0%	
Total			52.9%	26.8%	16.4%	1.9%	0.0%				100.0%	

Table B-3. Population Impacts, 94-06 Contour Set												
Census Tract	Total Popl of Census Tract	Affected Block Groups		Impacted Popl						TOTAL	Community	
		Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn				
Impact by community				0	0	0	0	0	0	0	0	Buckeye
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
				32	0	0	0	0	0	0	32	El Mirage
				100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
				6	5	4	0	0	0	0	15	Goodyear
				40.0%	33.3%	28.7%	0.0%	0.0%	0.0%	0.0%	100.0%	
				252	95	61	15	0	0	0	423	Glendale
				59.6%	22.5%	14.4%	3.5%	0.0%	0.0%	0.0%	100.0%	
				0	0	0	0	0	0	0	0	Surprise
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
				0	0	0	0	0	0	0	0	Youngtown
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
				290	100	65	15	0	0	0	470	Total off-base
Percent of each contour by community												
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Buckeye
				11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	El Mirage
				2.1%	5.0%	6.2%	0.0%	0.0%	0.0%	0.0%	3.2%	Goodyear
				86.9%	95.0%	93.8%	100.0%	0.0%	0.0%	0.0%	90.0%	Glendale
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Surprise
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Youngtown
				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	
Population data from U.S. Census, 2001												
* On-base population												

Table B-4. Population Impacts, 70-30 Contour Set												
Census Tract	Total Popl of Census Tract	Affected Block Groups		Impacted Popl						TOTAL	Community	
		Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn				
Impact by community				0	0	0	0	0	0	0	0	Buckeye
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
				1,386	10	0	0	0	0	0	1,396	EI Mirage
				99.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
				5	5	2	0	0	0	0	12	Goodyear
				41.7%	41.7%	16.7%	0.0%	0.0%	0.0%	0.0%	100.0%	
				298	108	44	9	0	0	0	459	Glendale
				64.9%	23.5%	9.6%	2.0%	0.0%	0.0%	0.0%	100.0%	
				1	0	0	0	0	0	0	1	Surprise
				100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
				0	0	0	0	0	0	0	0	Youngtown
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
				1,690	123	48	9	0	0	0	1,868	Total off-base
Percent of each contour by community												
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Buckeye
				82.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	74.7%	EI Mirage
				0.3%	4.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.6%	Goodyear
				17.6%	87.8%	95.7%	100.0%	100.0%	100.0%	100.0%	24.6%	Glendale
				0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	Surprise
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Youngtown
				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table B-4. Population Impacts, 70-30 Contour Set												
Census Tract	Total Popl of Census Tract	Affected Block Groups		Impacted Popl						TOTAL	Community	
		Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn				
506.01	6,993	2	591	-	-	-	-	-	-	-	Buckeye / Cnty	
506.02	4,838	2	20	-	-	-	-	-	-	-	Buckeye / Cnty	
608.00	6,668	2	-	-	-	-	-	-	-	-	El Mirage	
609.00	6,988	1	2,347	-	-	-	-	-	-	-	El Mirage	
		2	3,337	980	-	-	-	-	-	980	El Mirage	
610.05	6,458	1	30	5	2	-	-	-	-	12	Goodyear / Cnty	
		2	-	-	-	-	-	-	-	-	Goodyear / Cnty	
		3	415	-	-	-	-	-	-	-	Goodyear / Cnty	
		5	-	-	-	-	-	-	-	-	Goodyear / Cnty	
610.08	8,067	1	626	406	10	-	-	-	-	416	El Mirage / Cnty	
		2	1,194	60	-	-	-	-	-	60	Glendale / Cnty	
		3	968	238	108	44	9	-	-	399	Glendale / Cnty	
610.07	4,392	3	70	1	-	-	-	-	-	1	Surprise	
		4	7	-	-	-	-	-	-	-	Surprise	
611.00	3,851	9	3,851	528	405	191	14	-	-	1,138	Luke AFB	
716.00	2,775	1	-	-	-	-	-	-	-	-	Youngtown / Cnty	
717.00	3,769	4	-	-	-	-	-	-	-	-	Youngtown / Cnty	
Total	54,799		13,456	2,218	528	237	23	-	-	3,006		
Onbase	3,851		3,851	528	405	191	14	-	-	1,138		
Offbase	50,948		9,605	1,690	123	46	9	-	-	1,868		
Total	54,799		13,456	2,218	528	237	23	-	-	3,006		
Percent on/off-base by contour												
Onbase	7.0%		28.6%	23.8%	76.7%	80.6%	60.9%	0.0%	0.0%	37.9%		
Offbase	93.0%		71.4%	78.2%	23.3%	19.4%	99.1%	0.0%	0.0%	62.1%		
Total	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%		
Percent by contour level for on- and off-base												
			Onbase	46.4%	35.6%	16.8%	1.2%	0.0%	0.0%	100.0%		
			Offbase	90.5%	6.6%	25%	0.5%	0.0%	0.0%	100.0%		
			Total	73.8%	17.6%	7.9%	0.8%	0.0%	0.0%	100.0%		

Table B-5. Population Impacts, 50-50 Contour Set												
Census Tract	Affected Block Groups			Impacted Popl								
	Popl of Census Tract	Block Group	Popl of Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn	TOTAL	Community		
506.01	6,993	2	591	-	-	-	-	-	-	-	-	Buckeye / Cnty
506.02	4,838	2	20	-	-	-	-	-	-	-	-	Buckeye / Cnty
606.00	6,668	2	-	-	-	-	-	-	-	-	-	El Mirage
606.00	6,988	1	2,347	-	-	-	-	-	-	-	-	El Mirage
		2	3,337	2,328	-	-	-	-	2,328	-	-	El Mirage
610.05	6,458	1	30	5	5	1	-	-	11	-	-	Goodyear / Cnty
		2	-	-	-	-	-	-	-	-	-	Goodyear / Cnty
		3	415	-	-	-	-	-	-	-	-	Goodyear / Cnty
		5	-	-	-	-	-	-	-	-	-	Goodyear / Cnty
610.06	8,067	1	626	433	153	-	-	-	586	-	-	El Mirage / Cnty
		2	1,194	239	-	-	-	-	239	-	-	Glendale / Cnty
		3	968	236	104	37	16	-	393	-	-	Glendale / Cnty
610.07	4,392	3	70	12	-	-	-	-	12	-	-	Surprise
		4	7	-	-	-	-	-	-	-	-	Surprise
611.00	3,851	9	3,851	787	459	150	27	-	1,423	-	-	Luke AFB
716.00	2,775	1	-	-	-	-	-	-	-	-	-	Youngtown / Cnty
717.00	3,789	4	-	-	-	-	-	-	-	-	-	Youngtown / Cnty
Total	54,799		13,456	4,040	721	188	43	-	4,992	-	-	
Onbase	3,851		3,851	787	459	150	27	-	1,423	-	-	
Offbase	50,948		9,605	3,253	262	38	16	-	3,569	-	-	
Total	54,799		13,456	4,040	721	188	43	-	4,992	-	-	
Percent on/off-base by contour												
Onbase	7.0%		28.6%	19.5%	63.7%	75.8%	62.8%	0.0%	28.5%			
Offbase	93.0%		71.4%	80.5%	36.3%	20.2%	37.2%	0.0%	71.5%			
Total	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%			
Percent by contour level for on- and off-base												
				55.3%	32.3%	10.5%	1.9%	0.0%	100.0%			
				91.1%	7.3%	1.1%	0.4%	0.0%	100.0%			
				90.9%	14.4%	3.8%	0.9%	0.0%	100.0%			

Table B-5. Population Impacts, 50-50 Contour Set										
Census Tract	Popl of Affected Block Groups		Impacted Popl					TOTAL	Community	
	Census Tract	Block Group	65 Ldn	70 Ldn	75 Ldn	80 Ldn	85 Ldn			
Impact by community			0	0	0	0	0	0	Buckeye	
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
			2,761	153	0	0	0	2,914	El Mirage	
			94.7%	5.3%	0.0%	0.0%	0.0%	100.0%		
			5	5	1	0	0	11	Goodyear	
			45.5%	45.5%	9.1%	0.0%	0.0%	100.0%		
			475	104	37	16	0	632	Glendale	
			75.2%	18.5%	5.9%	2.5%	0.0%	100.0%		
			12	0	0	0	0	12	Surprise	
			100.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
			0	0	0	0	0	0	Youngtown	
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
			3,253	262	38	16	0	3,569	Total off-base	
								3,569		
Percent of each contour by community										
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Buckeye	
			84.9%	58.4%	0.0%	0.0%	0.0%	81.6%	El Mirage	
			0.2%	1.9%	2.8%	0.0%	0.0%	0.3%	Goodyear	
			14.6%	39.7%	97.4%	100.0%	0.0%	17.7%	Glendale	
			0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	Surprise	
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Youngtown	
			100.0%	100.0%	100.0%	100.0%	0.0%	100.0%		

Alternative	Table B-6. Summary Comparison of Impacts, by Contour											
	Acreage Affected						Population Affected					
	On-Base		Off-Base		Total		On-Base		Off-Base		Total	
	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30
PA												
65 Contour (65-69 Ldn)	244	327	4,736	5,287	4,980	5,615	537	528	290	1,690	827	2,218
70 Contour (70-74 Ldn)	288	289	2,674	2,913	2,962	3,201	360	405	100	123	450	528
>75 Ldn	1,355	1,530	1,686	1,601	3,041	3,131	205	205	80	55	285	260
Total	1,886	2,146	9,096	9,801	10,983	11,947	1,092	1,138	470	1,868	1,562	3,006
% of JLUS	74.1%	84.3%	46.0%	49.6%	49.2%	53.5%	31.0%	32.3%	7.7%	30.7%	16.2%	31.3%
IA												
65 Contour (65-69 Ldn)	327	311	5,287	5,511	5,615	5,822	528	787	1,690	3,253	2,218	4,040
70 Contour (70-74 Ldn)	289	284	2,913	2,991	3,201	3,275	405	459	123	262	528	721
>75 Ldn	1,530	1,558	1,601	1,586	3,131	3,144	205	177	55	54	260	231
Total	2,146	2,153	9,801	10,088	11,947	12,241	1,138	1,423	1,868	3,569	3,006	4,992
% of JLUS	84.3%	84.6%	49.6%	51.0%	53.5%	54.8%	32.3%	40.4%	30.7%	58.6%	31.3%	51.9%
NA												
65 Contour (65-69 Ldn)	263		6,084		6,348		1,385		4,979		6,364	
70 Contour (70-74 Ldn)	255		3,640		3,894		641		511		1,152	
>75 Ldn	1,933		2,379		4,312		405		133		538	
Total	2,451		12,103		14,554		2,431		5,623		8,054	
% of JLUS	96.3%		61.2%		65.2%		69.0%		92.3%		83.7%	
JLUS												
65 Contour (65 Ldn +)	2,545		19,773		22,318		3,525		6,092		9,617	
% of JLUS	100.0%		100.0%		100.0%		100.0%		100.0%		100.0%	

Table B-6. Summary Comparison of Impacts, by Contour

Alternative	Percentage of Acreage Affected						Percentage of Population Affected					
	On-Base		Off-Base		Total		On-Base		Off-Base		Total	
	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30	94-06	70-30
PA												
65 Contour (65-69 Ldn)	12.9%	15.3%	52.1%	53.9%	45.3%	47.0%	49.2%	46.4%	61.7%	90.5%	52.9%	73.8%
70 Contour (70-74 Ldn)	15.3%	13.4%	29.4%	29.7%	27.0%	26.8%	32.1%	35.6%	21.3%	6.6%	28.8%	17.6%
>75 Ldn	71.8%	71.3%	18.5%	16.3%	27.7%	26.2%	18.8%	18.0%	17.0%	2.9%	18.2%	8.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
IA												
65 Contour (65-69 Ldn)	15.3%	14.4%	53.9%	54.6%	47.0%	47.6%	46.4%	55.3%	90.5%	91.1%	73.8%	80.9%
70 Contour (70-74 Ldn)	13.4%	13.2%	29.7%	29.6%	26.8%	26.8%	35.6%	32.3%	6.6%	7.3%	17.6%	14.4%
>75 Ldn	71.3%	72.4%	16.3%	15.7%	26.2%	25.7%	18.0%	12.4%	2.9%	1.5%	8.6%	4.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
NA												
65 Contour (65-69 Ldn)	10.7%		50.3%		43.6%		57.0%		88.5%		79.0%	
70 Contour (70-74 Ldn)	10.4%		30.1%		26.8%		26.4%		9.1%		14.3%	
>75 Ldn	78.9%		19.7%		29.6%		16.7%		2.4%		6.7%	
Total	100.0%		100.0%		100.0%		100.0%		100.0%		100.0%	

APPENDIX C

**EXPANDED EXECUTIVE SUMMARY PROVIDED
TO TRIBAL ORGANIZATIONS FOR REVIEW**

APPENDIX C.
Expanded Executive Summary Provided to Tribal Organizations for Review

This appendix includes a copy of the Expanded Executive Summary (EES) of the Draft EA that was sent for review to tribal organizations, in accordance with their request, in lieu of the entire Draft EA. The EES contained additional material and a copy of Figure 4.4-1, comparing the noise and land use impacts of the Proposed Action and alternatives. The EES is reproduced exactly as it was sent to the tribal organizations.

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1 **EXPANDED EXECUTIVE SUMMARY**

2 The United States Air Force proposes to make changes in flight operations at Luke Air
 3 Force Base (AFB), Arizona. These changes include permanently implementing the
 4 temporary changes in the predominant direction of takeoff that have been phased in over
 5 the past year, occasionally shifting a few operations to Saturdays, shifting some flight
 6 operations to nighttime, and increasing the number of student pilots at the base. The
 7 purpose and need for the action is to support national security, meet Air Force and Federal
 8 Aviation Administration safety requirements, and address changes in Air Force training
 9 requirements and increased Air Force demand for night vision goggle-trained pilots.

10 The Proposed Action and Implementation Alternative each consist of four components
 11 (described below). These alternatives differ only in the first component, which addresses
 12 the proportion of takeoff and landing directions. Table 1 presents the flight direction
 13 proportions by alternative.

Table 1. Comparison of Flight Direction by Alternative		
<i>Alternative</i>	<i>Percentage of Take-offs and Landings by Direction</i>	
	<i>To Southwest</i>	<i>To Northeast</i>
Proposed Action	70 to 94	6 to 30
Implementation Alternative	50 to 70	30 to 50
No Action Alternative	30	70

14 The **Proposed Action** consists of permanent implementation of changes in direction of
 15 takeoff, Saturday operations, nighttime operations, and an increase in student pilots. The
 16 Proposed Action would be fully implemented by the end of Fiscal Year (FY) 2002
 17 (October 1, 2001 through September 30, 2002), and would permanently implement the
 18 temporary changes in the predominant direction of takeoff that have been phased in over
 19 the past year. Luke AFB runways are oriented northeast-southwest. Until recently,
 20 approximately 70 percent of flights took off to the northeast.

21 Under the Proposed Action, an estimated 70 to 94 percent of flights would arrive and
 22 depart to the southwest. Prevailing wind direction varies according to season, time of day,
 23 and local weather events; therefore, the percentage of flights to the southwest would also
 24 vary accordingly. Aircraft would continue to depart with tailwinds of up to 10 knots, when
 25 appropriate, to minimize noise impacts to the communities surrounding Luke AFB. The
 26 56th Fighter Wing (56 FW) would add operations on one Saturday per month, as needed.
 27 These 56 FW Saturday operations would be in addition to operations that are already flown
 28 two Saturdays per month by the 944th Fighter Wing, an Air Force Reserve Command
 29 tenant unit at Luke AFB. The 56 FW Saturday operations would not be additions to the
 30 total overall number of operations at Luke AFB, but would primarily serve to make up for
 31 operations during the week that were postponed due to adverse weather or for other
 32 reasons; these are necessary to ensure that the full complement of student flights occurs.

1 The 56 FW would shift some daytime flight operations to occur after dark. The Air Force
2 has recently increased its requirement for the number of F-16 pilots trained to perform
3 flights during darkness using night vision goggles. To meet this requirement, aircraft must
4 depart at least one hour after sunset. Night training flights would occur Monday through
5 Thursday, with one flying period shortly after sunset and another flying period occurring
6 later. Only a few flights would depart after 10:00 p.m., and except in unusual circum-
7 stances, the latest returns to Luke AFB would be before midnight. The total overall
8 number of flying operations at the base would not increase. The proposed nighttime and
9 Saturday operations would use the same flight tracks and locations as existing operations.
10 There would be an increase in the number of F-16 pilot trainees at Luke AFB. Changes in
11 training requirements would lead to an increase in the number of students who move
12 through the training program, and courses would be shorter. Although the number of
13 operations would not increase, the number of student pilots assigned to Luke AFB at any
14 given time would increase. All current procedures to minimize the impacts of aircraft
15 operations on sensitive receptors within the Barry M. Goldwater Range (BMGR) and the
16 Tohono O’odham Nation lands would continue unchanged. The number of Luke AFB
17 operations over these areas would not change.

18 The **Implementation Alternative** would include the same four components as listed
19 under the Proposed Action (permanent implementation of changes in direction of takeoff,
20 Saturday operations, nighttime operations, and an increase in pilot trainees); only the first
21 component differs from the Proposed Action. Under the Implementation Alternative, an
22 estimated 50 to 70 percent of flights would depart to the southwest. The actual percentage
23 of flights to the southwest would also vary according to prevailing winds and local weather
24 conditions. Aircraft would continue to depart with tailwinds of up to 10 knots, when
25 appropriate, to minimize noise impacts to the communities surrounding Luke AFB. All
26 current procedures to minimize the impacts of aircraft operations on sensitive receptors
27 within the BMGR and the Tohono O’odham Nation lands would also continue unchanged
28 under this alternative, and the number of Luke AFB operations over these areas would not
29 change. The Implementation Alternative would be operational by the end of FY 2002.

30 Under the **No Action Alternative**, aircraft using the Luke AFB runways would cease the
31 temporary changes that have occurred, and return to operating predominantly to the
32 northeast (approximately 70 percent of the time). Safety concerns would resume regarding
33 takeoffs and landings that are not into the wind. The 56 FW Saturday operations that are
34 needed to ensure that student pilots meet the training program requirements would not
35 occur, and new Air Force student pilot training requirements would not be met at Luke
36 AFB. The operations during darkness that are needed for the night vision goggle-training
37 of pilots would not occur, and Luke AFB would not be able to meet the Air Force demand
38 for night vision goggle-trained pilots to the extent required. There would be no increase in
39 the number of student pilots assigned to Luke AFB.

40 **POTENTIAL ENVIRONMENTAL CONSEQUENCES**

41 The following resource areas were analyzed for potential environmental consequences
42 associated with the Proposed Action, Implementation Alternative, and the No Action
43 Alternative. These relevant resource areas were selected after identifying potential issues
44 and concerns. Because no ground disturbing activities would occur, impacts to geological,

1 water, and cultural resources were not assessed in the EA, and the assessment of biological
2 resources was limited to threatened, endangered, and candidate species. No construction
3 activity would occur, and there would be no change in the number of permanent personnel
4 assigned to Luke AFB; therefore, transportation was not assessed. There would be no
5 change in the number or type of flight operations, so it was not necessary to analyze
6 impacts to environmental programs.

7 **Air Operations and Safety.** Under the Proposed Action, the change in flight operations
8 at Luke AFB would not have a significant impact on aircraft operations, flight safety, or
9 bird-aircraft strikes. The Proposed Action would provide a long-term improvement in the
10 viability of the mission at Luke AFB, and would improve safety conditions for densely
11 populated communities northeast of the base. Impacts from the Implementation Alter-
12 native would be similar to those under the Proposed Action, but with less improvement to
13 mission viability and community safety. Under the No Action Alternative, impacts to
14 safety would be insignificant due to the use of long-established best management safety
15 practices. Mission-related impacts to Luke AFB operations would be significant, because
16 the Air Force-required training would not be provided to the full extent.

17 **Air Resources.** The Proposed Action would likely cause a slight reduction in air quality
18 impacts, as compared to the No Action Alternative. The same number of aircraft
19 operations would occur under the Proposed Action as occurred under the No Action
20 Alternative (i.e., prior to the temporary changes in flight direction). However, more flights
21 would depart directly toward the BMGR, thus reducing the length of flights and overall air
22 emissions. The Proposed Action does not include any addition or modification of a
23 stationary source or construction, or increased use of aerospace ground equipment or
24 fueling operations. The Proposed Action conforms to the State Implementation Plan and is
25 exempt from further conformity review. Impacts to air quality under the Proposed Action
26 would be insignificant.

27 Under the Implementation Alternative, flight lengths would be greater than under the
28 Proposed Action, but less than under the No Action Alternative. Consequently, emissions
29 would be slightly reduced, but less than under the Proposed Action. The Implementation
30 Alternative also conforms to the State Implementation Plan and is exempt from further
31 conformity review. Under the No Action Alternative, emission levels that occurred prior
32 to the temporary changes in flight operations would resume. Impacts to air quality under
33 the Implementation or No Action Alternatives would be insignificant.

34 **Biological Resources.** The evaluation of impacts to biological resources is limited for
35 this analysis to threatened, endangered, or candidate species. No construction or
36 demolition would occur and no critical habitat would be disturbed. The shift of a small
37 number of flight operations from daytime to nighttime would have insignificant impacts,
38 since there are no protected nocturnal species in the vicinity of the airfield. Changes in
39 flight operations associated with the Proposed Action would have insignificant impacts to
40 threatened or endangered species. Impacts from the Implementation Alternative would be
41 the same as those under the Proposed Action. Under the No Action Alternative, flight
42 operations ongoing prior to the temporary change would resume and there would be no
43 significant impacts to protected species.

1 **Noise and Land Use.** Impacts on the noise environment are related to the magnitude of
 2 noise levels and to the proximity of noise-sensitive receptors to the noise source. Noise
 3 and land use are discussed together because changes in aircraft operations can result in
 4 changes in noise levels that, in turn, affect land use.

5 There would be varying levels of insignificant impacts to the noise environment in the
 6 communities surrounding Luke AFB from the Proposed Action, Implementation
 7 Alternative, or No Action Alternative.

8 The *decibel* (dB) is the physical unit commonly used to describe sound levels. Sound
 9 measurement is further refined by using an “A-weighted” decibel (dBA) scale that
 10 emphasizes the frequency audible to the human ear. Thus, the dBA measurement more
 11 closely describes how a person perceives sound. The descriptor used for noise contours is
 12 the *day-night average sound level* (L_{dn}), which describes the 24-hour or daily noise
 13 environment by measuring single noise events using a dBA scale adjusted for events and
 14 time of day. A 10-dB penalty is added for noise between the hours of 10 p.m. and 7 a.m.,
 15 because nighttime noise events are considered more annoying than noise during daytime.
 16 The contours shown in Figure 1 are based on L_{dn} levels.

17 There are current land use restrictions within the 65 dB contours established by the 1988
 18 Joint Land Use Study (JLUS). The noise contours from this study were codified into law
 19 by the Arizona Legislature in 1995 (A.R.S. Sec. 28-8462). Areas of concern regarding
 20 potential impacts include the number of acres and people affected and the exceedance of
 21 the JLUS contour by any contour associated with the Proposed Action or Implementation
 22 Alternative. Table 2 summarizes and compares the impacts to land, population, and JLUS
 23 exceedance. Figure 1 (at the end of this document) presents the 65 L_{dn} contours
 24 representing 94, 70, and 50 percent of operations to the southwest, along with the No
 25 Action Alternative (baseline) and JLUS contour. All five contours are overlain on a single
 26 land use map to allow a comparison of specific areas of impact. No contours reflecting
 27 noise levels above 65 L_{dn} for any alternative exceed the JLUS contour.

<i>Operational Proportion²</i>	<i>Total Acreage Affected</i>	<i>Off-base Residential Land Affected (Acres)³</i>	<i>Exceedance of JLUS Contour⁴ (Acres)</i>	<i>Population Affected</i>
94% to SW	10,983	410	268 (95% agricultural)	1,562
70% to SW	11,947	892	83 (96% agricultural)	3,006
50% to SW	12,241	1,195	55 (91% residential)	4,992
30% to SW	14,554	1,651	448 (57% agricultural)	8,054
JLUS Contour	22,318	2,169	-	9,617

¹Detailed impacts by noise level, land use categories, and on-base and off-base land use can be found in Sections 3.5, 4.5, and Appendix B of the Environmental Assessment.

²The 94 percent and 70 percent contours represent the upper and lower limits, respectively, of the Proposed Action. The 70 percent and 50 percent contours represent the upper and lower limits, respectively, of the Implementation Alternative. The 30 percent contour represents No Action Alternative (baseline conditions).

³Residential land includes the residential and low-density residential land use categories.

⁴JLUS = Joint Land Use Study (1988 Luke AFB noise contours, codified into Arizona law in 1995).

1 Under the **Proposed Action**, 70 to 94 percent of operations would be to the southwest.
2 There would be fewer noise impacts affecting populations and land use to the northeast,
3 especially in El Mirage and nearby areas. Impacts to the less-populated and largely
4 agricultural or open lands to the southwest would be insignificant.

5 The Proposed Action's contour representing 94 percent of operations to the southwest (the
6 "94 percent contour") impacts the least amount of land, nearly 11,000 acres (49 percent of
7 the JLUS area), and the smallest number of people, only 1,560 (16 percent of the
8 population within the JLUS contour). The 70 percent contour impacts nearly 12,000 acres
9 (54 percent of JLUS area) and 3,000 people (31 percent of JLUS area).

10 The 65 L_{dn} (average sound level) contours for the Proposed Action (both the 94 percent
11 and 70 percent contours) extend outside of the JLUS contour in small areas to the
12 southwest of Luke AFB; 95 percent of the exceedance is on agricultural land and the
13 remaining 5 percent is residential. These exceedances of the JLUS contour would occur
14 within the context of the legally-defined territory within a military airport, where noise is
15 required to be attenuated to 65 L_{dn} or less, and would thus have only insignificant impacts
16 on land use. Under the Proposed Action, the 65 L_{dn} contours would not exceed the JLUS
17 contour in residential areas in El Mirage, as it does under baseline conditions; this would
18 be an improvement over baseline conditions.

19 Under the **Implementation Alternative**, 50 to 70 percent of operations would be to the
20 southwest. Noise impacts northeast of the base would also be reduced, but to a lesser
21 extent than under the Proposed Action. The Implementation Alternative affects more land
22 acreage and people than the Proposed Action, but less than the No Action Alternative.
23 Impacts would be insignificant both to the urbanized areas to the northeast and to the less-
24 populated lands to the southwest.

25 The Implementation Alternative's upper limit, with 70 percent of operations to the
26 southwest, impacts nearly 12,000 acres (54 percent of the JLUS area) and 3,000 people (31
27 percent of the JLUS area). The Implementation Alternative's lower limit, the 50 percent
28 contour, affects 12,240 acres (55 percent of JLUS) and nearly 5,000 people (52 percent of
29 JLUS).

30 The 70 percent contour exceeds the JLUS by 83 acres; nearly all (96 percent) of the
31 exceedance area is agricultural, and the remainder is residential. The 50 percent contour
32 exceeds the JLUS by only 55 acres, but most (91 percent) affects residential land use,
33 mostly in El Mirage; the remaining 9 percent is open space.

34 Under the **No Action Alternative**, the temporary directional changes would cease, and
35 flight operations would be to the southwest 30 percent of the time. Insignificant adverse
36 noise impacts to the heavily populated area northeast of Luke AFB would resume, with
37 possible insignificant adverse impacts to economic growth throughout the areas involved.

38 The No Action Alternative (30 percent of operations to the southwest) impacts the greatest
39 amount of land and the largest number of people within the JLUS contour: 14,500 acres
40 (65 percent of the land), and 8,054 people (nearly 84 percent of the population).

41 The 65 L_{dn} contour for the No Action Alternative exceeds the JLUS contour substantially
42 more than any other alternative, with nearly 450 acres falling outside the JLUS contour.

1 About 57 percent of the exceedance is agricultural land (west of the base), and 13 percent
2 is residential (in El Mirage); the remainder includes 22 percent open space or public land,
3 and 8 percent industrial land use.

4 **Socioeconomics.** Socioeconomic resources could be affected by land use changes that
5 would occur with the adoption of noise contours associated with the Proposed Action or
6 Implementation Alternative. Changes in allowable land use could affect the economic
7 value of certain land parcels. However, because the JLUS contours and the resulting land
8 use constraints have been codified into law by the Arizona legislature, economic effects of
9 an alternative would occur only where the contours related to that alternative would fall
10 outside the existing JLUS contours. Impacts under the Proposed Action or the
11 Implementation Alternative would be insignificant. The impacts of the No Action
12 Alternative would be greater than impacts under the Proposed Action or Implementation
13 Alternative, but would still be insignificant.

14 **Environmental Justice.** Environmental justice impacts could result from land use
15 changes associated with the adoption of an alternative's noise contours, if the changes
16 were to affect low-income or minority populations disproportionately. Minority and low-
17 income populations occur throughout the region of influence in varying proportions, with
18 the largest concentration that would be affected by changes in noise contours being located
19 in El Mirage. Under the Proposed Action, noise levels in that area (northeast of Luke
20 AFB) would be substantially reduced, thus improving noise conditions in the El Mirage
21 area. Under the Implementation Alternative, improved noise conditions would be similar
22 to but less than those under the Proposed Action. Under the No Action Alternative,
23 departures and arrivals would resume over El Mirage and other heavily populated
24 communities to the northeast, resulting in an adverse but insignificant impact.

25 **Cumulative impacts** are those changes to the physical, socioeconomic, and biological
26 environments that would result from the Proposed Action or Implementation Alternative in
27 combination with past, present, and reasonably foreseeable future actions. Significant
28 cumulative impacts could result from impacts that are not significant individually, but
29 when considered together, are collectively significant.

30 The proposed changes in operations at Luke AFB could result in a long-term shift in
31 impacts from areas northeast of Luke AFB to areas southwest of the base. These changes
32 would occur within the context of flights originating from several airports in the region and
33 constitute a small fraction of total flights in the area. The changes in operations would be
34 insignificant when considered in relation to other flights from Glendale Municipal Airport,
35 Phoenix-Sky Harbor International Airport, and area flying schools.

36 Overall emissions from aircraft could decrease slightly as a result of the Proposed Action
37 or Implementation Alternative. Based on an analysis of land use maps and predicted noise
38 contours, noise levels would increase slightly in agricultural land use areas and decrease in
39 residential areas. The use of land for agricultural purposes is not limited by the intensity of
40 aircraft-generated noise, while residential land use is limited by noise levels.
41 Consequently, impacts predicted for noise, air, and other resource elements would not
42 cause significant cumulative impacts when considered with other ongoing and planned
43 activities on-base and in the base vicinity.

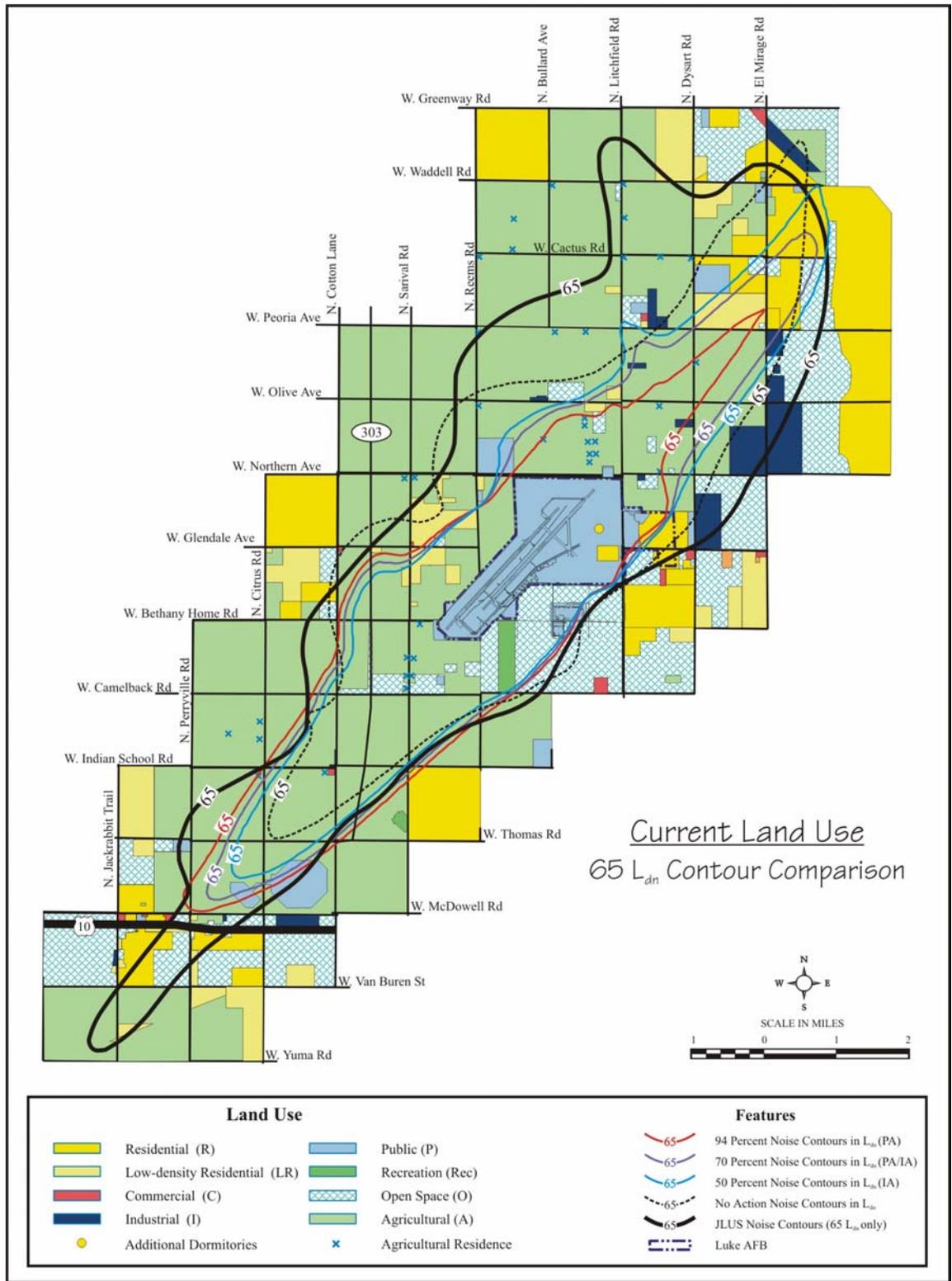


Figure 1. Land Use Comparison of 65 L_{dn} Contours, All Alternatives and JLUS

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