ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL

PROJECT INFORMATION

Project Title: Automatic Flight Following Hardware	Project No. 08-717
Region/GMU: Region 4 (Statewide application)	HPC: Southwest

Project Type: Equipment

Project Description: Purchase GPS/satellite phone interface equipment to be installed in 4 fixed wing planes to allow 24 hr. positions tracking (2 minute interval) by dispatchers while planes are engaged in low-level survey flights.

Wildlife Species to Benefit: Antelope 53%, Mule deer 22%, Elk 16%, Javelina 9%

Possible Funding Partners:

Implementation Schedule:
Beginning: June 2007
Completed: June 2007

PROJECT FUNDING

SBG Funds Requested: Antelope Tag Fund----$7961.00
Mule Deer Tag Fund--$3304.00
Elk Tag Fund----------$2403.00
Javelina Tag Fund-----$1352.00

Cost Share Funds: ----------$ 0

Total Project Costs: ----------$15,020

PARTICIPANT INFORMATION

Applicant: Dave Conrad Telephone: 623-910-7872	Address: 9140 E. 28th St. Yuma, AZ 85365
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with:	Date:
Applicant's signature:	Date: 2-2-07

NEED STATEMENT/PROBLEM ANALYSIS:

Aircraft wildlife surveys are inherently dangerous. Department policy requires survey crew flight following with dispatchers on a 1-hour interval. Using a common survey speed of 80 mph, in the case of a missing aircraft, the search area could potentially be as large as 20,096 sq. mi. Using the same scenario with 2-minute interval location data from the flight following system, the search area would be about 22 sq. mi.

PROJECT OBJECTIVES:
Purchase 4 automatic flight following units and install in the Department's Super Cub, 182, 185 and 206.

PROJECT STRATEGIES:
Automatic flight following equipment consists of a GPS/satellite phone interface, cables and antenna (less than 10 lb).

The hardware can be installed by the Department's Mechanic II, has a 1-year warrantee and is certified by the FAA.

Each unit costs $1.80/hr. to operate and can be turned off when the aircraft is not involved in low-level hazardous work. Approximately 890 hours of actual low level survey flight was performed in 2006 (Antelope 53%, Mule deer 22%, Elk 16%, Javelina 9%), which would lead to an anticipated operating cost of $1,600 per year.

When activated, the unit sends a gps location (2-minute interval) through a satellite-based system to a central Internet server operated by the vendor. The department accesses the vendors website using a password and can view a detailed map displaying each units recent locations. Prices are based on using the same vendor our helicopter contractor (Papillon) uses, thus enabling our dispatchers to use one screen to monitor all State and contract aircraft at once.

ITEMIZED USE OF FUNDS:

Equipment:

GPS/satellite hardware (includes cable and antenna) x 4 @ $3755.00 = $15,020.00

Total = $15,020.00

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:
Arizona Deer Association, Arizona Antelope Society, Arizona Elk Society, Rocky Mountain Elk Foundation, these organizations could endorse the use of tag funds and or contribute their own monies to create a match amount.

PROJECT MONITORING PLAN:
The Department's Aircraft Mechanic II and Radio Room personnel would monitor performance.

PROJECT MAINTENANCE:
The Department's Aircraft Mechanic II would perform any required maintenance.

PROJECT COMPLETION REPORT TO BE FILED BY:
Dave Conrad