



# COUNTY OF HUMBOLDT

For the meeting of: 3/21/2023

---

File #: 23-285

---

**To:** Board of Supervisors

**From:** Aviation

**Agenda Section:** Consent

**Vote Requirement:** Majority

**SUBJECT:**

Professional Services Agreement with Armstrong Consultants, Inc. for Instrument Landing System (ILS) Category II Instrument Procedure Feasibility Study

**RECOMMENDATION(S):**

That the Board of Supervisors:

1. Approve, and authorize the Chair of the Board to execute, the attached Professional Services Agreement with the Armstrong Consultants, Inc. regarding ILS Category II Instrument Procedure Feasibility Study in the amount of \$46,500 for the period of Feb. 28, 2023 through Dec. 31, 2023; and
2. Authorize the Director of Aviation, or designee thereof, to execute any and all subsequent amendments to the attached Professional Services Agreement with Armstrong Consultants, Inc., after review and approval by County Counsel, Risk Management and the County Administrative Office.

**SOURCE OF FUNDING:**

Aviation Enterprise Fund 3530381-2118

**DISCUSSION:**

An Instrument Landing System (ILS) is a precision radio navigation system that provides short-range guidance to aircraft to allow them to approach a runway under normal, or adverse, weather conditions. ILS uses two directional radio signals to provide horizontal and vertical guidance to pilots while landing and remains the most precise form of approach navigational aid for pilots, particularly during inclement weather.

ILS are categorized into 3 types: CAT I, CAT II, and CAT III. The lowest authorized minimums for an ILS CAT I approach includes a Decision Height (DH) of 200 feet and a Runway Visual Range (RVR) of 1800 feet, as long as, the runway is equipped with Touch Down Zone and Centerline Lights. The lowest Minimums for a CAT II approach include a DH of 100 feet and a RVR of 1200 feet. The lowest

minimums for a CAT III approach include a DH 100 feet and an RVR of 700 feet. A CAT III approach is not an option for ACV because of the additional ground-based equipment required and the requirement for an operational Air Traffic Control Tower. Additionally, to date the FAA has only supported large-hub airports (i.e. SFO, SEA, DEN, LAX, etc.) in development of CAT III ILSs.

California Redwood Coast-Humboldt County Airport (ACV) has a Federal Aviation Administration (FAA) approved CAT I ILS, but has a need to determine the feasibility of implementing an ILS CAT II approach to better serve the facility users and community. The lower minimums associated with an ILS CAT II could significantly reduce the number of aircraft diversions, delays, and cancellations at ACV.

The Professional Services Agreement with Armstrong Consultants regarding an ILS Category II Instrument Procedure Feasibility Study will assist in analyzing which aircraft/helicopter operators will be able to benefit from these enhancements and the hourly/monthly effectiveness of these approach enhancements at enabling safe/on-time arrivals into ACV. The proposed study will establish existing/baseline capabilities of aircraft/helicopter (U.S. Coast Guard-Sector Humboldt Bay) operators using the current airfield layout, navigational aids and instrument procedures, identify the feasibility and operational benefits associated with obtaining ILS CAT II approach minimums on Runway 32, and coordinate participation/outreach with airport users, airport administration, FAA, Coast Guard, and other project stakeholders.

On April 27, 2021, your Board approved a pre-qualification list for airport consultants. Armstrong Consultants, Inc. was pre-qualified on that list.

Accordingly, the Department of Aviation recommends that the Board of Supervisors approve, and authorize the Chair to execute, the attached Professional Services Agreement with Armstrong Consultants, Inc. for an ILS CAT II Feasibility Study for the period of Feb. 28, 2023 through Dec. 31, 2023. Staff also recommends that the Board authorize the Director of Aviation, or designee thereof, to execute any and all subsequent amendments to the attached Professional Services Agreement with Armstrong Consultants, Inc., after review and approval by County Counsel, Risk Management and the County Administrative Office.

**FINANCIAL IMPACT:**

<b>Expenditures (3530381 2118)</b>	<b>FY 22-23 Adopted</b>	<b>FY 23-24 Projected</b>	<b>FY 24-25 Projected</b>
Budgeted Expenses	\$46,500	\$0	\$0
Additional Appropriation Requested	\$0	\$0	\$0
<b>Total Expenditures</b>	<b>\$46,500</b>	<b>\$0</b>	<b>\$0</b>
<b>Funding Sources (3530381 4455)</b>	<b>FY22-23 Adopted</b>	<b>FY23-24 Projected*</b>	<b>FY24-25 Projected*</b>
CARES Act Grant	\$46,500	\$0	\$0
<b>Total Funding Sources</b>	<b>\$46,500</b>	<b>\$0</b>	<b>\$0</b>

*\*Projected amounts are estimates and are subject to change.*

**Narrative Explanation of Financial Impact:**

The attached Professional Services Agreement with Armstrong Consultants, Inc. has a total payable of \$46,500 for the period of Feb. 28, 2023 through Dec. 31, 2023. However, in the event local, state or federal funding is reduced or eliminated, the County of Humboldt may reduce the above-referenced maximum amount payable or terminate the attached Professional Services Agreement with Armstrong Consultants, Inc.

Expenditure appropriations related to the attached agreement have been included in the approved fiscal year (FY) 2022-2023 budget for the Department of Aviation, Airport Enterprise Fund, Professional Services (3530381-2118). As a result, approval of the agreement with the Armstrong Consultants, Inc. will not impact the General Fund.

STAFFING IMPACT:

N/A

STRATEGIC FRAMEWORK:

This action supports your Board's Strategic Framework priority of providing community-appropriate levels of service

OTHER AGENCY INVOLVEMENT:

N/A

ALTERNATIVES TO STAFF RECOMMENDATIONS:

The Board could choose not to approve the agreement or allow the Chair to sign such agreements. However, this alternative is not recommended as it will impact the ability for the Department of Aviation to determine the feasibility of upgrading to an ILS CAT II approach, which if determined feasible and approved by the Federal Aviation Administration, would provide an immense benefit to Humboldt County, emergency operators (Cal-Fire, Life Flights, USCG-Sector Humboldt Bay), the traveling public, and general aviation community.

ATTACHMENTS:

1. Professional Services Agreement - ILS CAT II Instrument Procedure Feasibility Study

PREVIOUS ACTION/REFERRAL:

Board Order No.: D-1

Meeting of: 04/27/2021

File No.: 21-509