#### **Notice of Meeting**

#### **UNIVERSITY OF HAWAI'I**

#### BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS

Members: Regents Tagorda (Chair), Higa (Vice-Chair), Bal, Kudo, and Sullivan

**Date:** Thursday, September 6, 2018

**Time:** 9:15 a.m.

Place: University of Hawai'i at Mānoa

Information Technology Building 1<sup>st</sup> Floor Conference Room 105A/B

2520 Correa Road Honolulu, Hawai'i 96822

#### **AGENDA**

- I. Call Meeting to Order
- II. Approval of Minutes of May 18, 2018 Meeting
- III. Public Comment Period: All written testimony on agenda items received after posting of this agenda and up to 24 hours in advance of the meeting will be distributed to the board. Late testimony on agenda items will be distributed to the board within 24 hours of receipt. Written testimony may be submitted via US mail, email at <a href="mailto:bor@hawaii.edu">bor@hawaii.edu</a>, or facsimile at 956-5156. Individuals submitting written testimony are not automatically signed up for oral testimony. Registration for oral testimony on agenda items will be provided at the meeting location 15 minutes prior to the meeting and closed once the meeting begins. Oral testimony is limited to three (3) minutes. All written testimony submitted are public documents. Therefore, any testimony that is submitted verbally or in writing, electronically or in person, for use in the public meeting process is public information and will be posted on the board's website.

#### IV. Agenda Items

- A. For Review & Approval
  - 1. Committee Goals and Objectives
- B. For Information & Discussion
  - 1. Aeronautical Sciences, Bachelor of Science Program Update
  - 2. Program Proposals: Content and Review
- V. Adjournment

# Item IV.A.1. Committee Goals and Objectives

# ITEM TO BE DISCUSSED AT MEETING

#### Committee on Academic and Student Affairs September 6, 2018

Committee BOR Bylaws (Bylaws of Board of Regents, Article II, Section D)

- (1) Review the academic mission and strategic direction of the system and its major units.
- (2) Periodically review to what extent programs support the mission and strategic direction of the University.
- (3) Monitor the quality and effectiveness of educational programs.
- (4) Develop and maintain policies governing academic and student affairs.
- (5) Review actions proposed by the President which fall under current board policies and procedures, including requests for exceptions.

#### **Proposed Goals and Objectives**

- Review and update policies as it relates to program planning
  - o RP Chapter 4
  - Policy statements
  - Academic Master Plan
- Review and discuss academic program approvals and action reports
- Continue to monitor enrollment management
  - Review enrollment reports
  - Early college/dual credit
  - Distance education
- Review and discuss issues as it relates to the student experience
  - Presentation from student government groups
  - Student hunger
  - o Financial aid

# Aeronautical Sciences, B.S.

Program Update Committee on Academic and Student Affairs September 6, 2018

of HAWAI'I°

UNIVERSITY OF HAWAI'I HILO

# **UH Hilo Mission Vision Strengths**

#### Mission and Vision

Challenge students to reach highest level of academic achievement by inspiring learning, discovery and creativity inside and outside the classroom; Engage with applied learning that links theory with practice

#### ▶ Strengths

- Aviation program aligns with development of emerging aerospace sector on Hawai'i Island
- ► Fits IAFP for strong STEM programs and applied sciences
- ► Related Unmanned Aircraft Systems (UAS) Certificate Program
- Residence hall capacity



# Proposed Aeronautical Science B.S. Program at UH Hilo

- Makes lucrative career as professional pilot more accessible to Hawai'i residents.
- Provides pathway to field with nationwide shortage over the at least the next 20 years
- Provides competitive edge for employment with major airlines
- Offers significant savings for Hawai'i residents compared to mainland 4-year programs



# Employment Outlook

- ▶ Pilot demand expected to increase for at least the next 20 years
- Number of people flying is expected to double world-wide in next 20 years from 4 to 8 billion (International Air Transport Association, 2017)
- ▶ 42% of pilots currently flying for major airlines in United States will reach mandatory retirement age of 65 by 2026 (Boeing, 2016)
- Military producing fewer pilots to go into commercial aviation
- ▶ 15% projected job growth in Hawai'i next 10 years (Hawai'i Industry Sectors)
- Major airlines desire pilots with a Bachelor's degree at time of hire



## Board of Regents Concerns

- 2017 ASA questions focus on contracted flight training vendor—
  - ▶ Cost for flight instruction
  - Cost for additional liability coverage
  - Equipment purchase and maintenance
  - ▶ Facilities both on campus and at airport
  - ► Enterprise risk management analysis
  - ► Safety analysis for Hilo location vs Honolulu site



# Revised Program

- ► Flight training no longer included by way of vendor contract with UH Hilo
- ► Students acquire intensive flight training in Year 4
- Students attend training at a provider of their choice
- Students have 3 years of preparation to determine their commitment to a career as an airline pilot
- Students have significant simulator and knowledge advantages that enhance their success in pilot training



#### Curriculum Year 1 to Year 3 at UH Hilo

Estimated Year 1 to Year 3 total cost of attendance: \$64,483

- Aeronautical Sciences content courses
  - Aviation weather, Aviation safety, Domestic and international navigation
  - Crew resource management, Leadership as a pilot
  - Introduction to practical single and multi-engine flying
- Simulator courses each semester
- Preparation for FAA written examinations
- General education courses and electives
- Create partnerships with CC programs by offering selected courses via DL and summer simulator "camps"



# Cost of Attendance UH Hilo Program

#### AERS Estimated Cost of Attendance Student Entering Fall 2019

Living on campus in student housing

	2019-2020	2020-2021	2021-2022	2022-2023 (Flight)	Total for 4 Years:
Flight Instruction				\$75,995	\$75,995
Tuition	\$7,272	\$7,344	\$7,417		\$22,033
Fees	\$461	\$475	\$490		\$1,426
Books and Supplies	\$1,071	\$1,103	\$1,136	\$1,171	\$4,482
Meals and Housing	\$8,495	\$8,750	\$9,013	\$8,000	\$34,259
Personal Expenses	\$3,164	\$3,259	\$3,357	\$3,458	\$13,238
Transportation	\$464	\$477	\$492	\$506	\$1,939
Loans Fees	\$78	\$81	\$83		\$242
Total:	\$21,006	\$21,490	\$21,988	\$89,130	\$153,613



Assumes living on campus in UHH student housing year 1-3

Estimated 3% Inflation Rate

Tuition for 18-19 and 19-20 is set per BOR, 20-21 is estimated at a 1% increase

https://hilo.hawaii.edu/financialaid/CostofAttendance1819.php

# Year 4 Flight Training at External Provider

Estimated Year 4 Total Cost of Attendance: \$89,129

- Year 4 flight training results in Commercial Multi-Engine Pilot License with Instrument Rating, Flight Instructor rating optional
- ► Aeronautical Sciences B.S. Degree conferred from UH Hilo
  - Credits from flight training courses transferred back to UH Hilo
  - ► MOU aligns learning outcomes and assessment with flight provider; Fulfills WASC requirements for unaccredited institutions
  - ▶ All necessary FAA training in a 9-month timeframe at fixed cost



# 4 Year Cost of Attendance Comparison

#### AERS Estimated Cost of Attendance Student Entering Fall 2019

Living on campus in student housing

	UH Hilo	Embry Riddle Aeronautical U Prescott	Arizona State University	Central Washington University
Flight Instruction	\$75,995	\$80,000	\$82,369	\$61,950
Tuition	\$22,033	\$142,616	\$113,344	\$86,332
Fees	\$1,426	\$7,272	\$2,872	\$7,608
Books and Supplies	\$4,482	\$5,600	\$5,200	\$4,008
Meals and Housing	\$34,259	\$45,576	\$52,984	\$44,460
Personal Expenses	\$13,238	\$13,635	\$7,928	\$7,008
Transportation	\$1,939	\$11,424	\$5,504	\$5,040
Loans Fees	\$242		\$288	
Cost of Attendance for 4 years:	\$153,613	\$306,123	\$270,489	\$216,406



# External Flight Provider

- ► Site visit to ATP Flight School in Phoenix, AZ (FAA part 61)
  - Institution develops professional attitudes, expectations, and a culture of teamwork in students.
  - ► Facility has 30-40 planes, multiple simulators, 2 maintenance hangers, staff of more than 10 FAA certified mechanics
  - ATP has 41 part 61 sites in the US, adequate capacity at any site
  - ► Phoenix/Mesa Airport largest site with capacity to take as many students from UH Hilo program that choose this school; Students may work as flight instructors to gain additional flight hours
  - Work on MOU initiated to align UH Hilo course learning objectives and assessment with ATP courses.



#### Students

- 20 students anticipated each year; 50 students at steady state
- Program could support up to 100 students
- Sources for student recruitment—
  - Hawai'i residents that desire to become pilots
  - Hawai'i Wing Civil Air Patrol Pathway
  - Maryknoll School MX Scholar Program for STEM & Aerospace
  - ▶ UH Hilo recruitment efforts
  - Articulation and other agreements with UHCC campuses to allow the first two years of the program to be available on all islands
  - Attractive to WUE students from states without aviation programs and potential for International recruitment



# Staffing and Equipment

- ► Faculty Staffing: \$250,000\*
  - ▶ 1 Assistant or Associate Professor \$95,000
  - ▶ 1 Instructor \$80,000
  - ▶ 1 Academic Specialist, 11-month \$75,000

- ► Simulator Equipment: \$120,000
  - ▶ 2 CRX Open Cockpit Simulators ~\$50,000 each
  - ▶ 6 Desktop Simulators ~\$3,500 each
- ► Maintenance and software upgrades: \$20,000/yr



<sup>\*</sup>Additional fringe cost of \$145,000 if G-funded positions are not available

### Accreditation and Partnership

- ▶ WASC Substantive Change Submittal
  - ▶ Application submitted July 2018
  - ► WASC chair consulted regarding viability of degree plan
  - ► Full Substantive Change Proposal due March 2019
- ► Partnering in State economic development initiatives
  - Aerospace initiatives on Hawai'i Island already Statesupported
  - ▶ Will require partnership with State for resources



# Invitation for Ideas



# Program Proposals: Content and Review

Donald O. Straney
Vice President Academic Planning and Policy
Academic and Student Affairs Committee
6 September, 2018

#### Concerns with Current Process

- Proposals come to the Board without context, such as
  - Fit to campus mission and priorities
  - Role in unit program portfolio
  - Relationship with similar programs at other campuses
  - Relevance to state, community and student needs
  - Trade-offs required to deliver the program
  - Comprehensive facility, enrollment and resource implications
  - Proposed-to-actual outcomes
- Process is cumbersome and time-consuming
  - Innovation, creativity and risk-taking are discouraged

# Coming: Context for Academic Program Planning

- 10- and 5-year Integrated System Plans and Strategic Directions
  - Goals and priorities to meet specific social, economic and demographic needs
  - Context for unit for programs, enrollment, facilities and operating resource plans
- 6-Year Rolling Academic Plan
  - Academic Implementation of the Integrated Unit Plans and Strategic Directions
  - Identify proposed program additions, deletions, changes for each of 6 years
  - Cross-walk with facilities, enrollment and operating resource plans
  - Summarize related program actions (reviews, provisional-to-permanent, etc.)
- Annual Report of Academic Program Planning
  - Summary of programs coming forward this year
    - Summary of fit of these to unit plans and priorities
    - Identify major impacts on facilities, enrollment and operating resource
  - Description of the new 6<sup>th</sup> year program plans added to the AMP

# Types of Program Proposals

- Capital-intensive proposals
  - Require appropriation of new positions, operating funds and/or CIP funds
- Redirection or Modernization proposals
  - May include new directions, but not new appropriations
  - Respond to student demand and what competitors are doing (e.g., sustainability)
  - Generally entail reallocations, rebalancing and refocusing of unit academic programs and instructional resources
  - Can be delivered with revitalization or modernization of facilities
- Modifications of existing program proposals
  - May involve change in name or type of degree
  - Generally require minimal curricular changes or resource needs
- Rapid Response to emerging State Needs
  - Unanticipated program needs requiring and rapid planning and implementation

# 1 - Concept Proposal (Authorization to Plan)

- <u>Department</u> generated conceptual description (ideas may be initiated at other levels, e.g., state need)
- College and campus review: preliminary estimates of operating and instructional resource needs and prospective demand
- Officers review: fit to mission, soundness of preliminary plan and relationship with programs at other campuses
- <u>Council of Chief Academic Officers review</u>: evaluation of academic fit to campus mission, relationship to programs at other campuses, articulation issues and partnership opportunities

Result: Addition to Unit 6-year Rolling Academic Master Plan Begin New Proposal Development

# 2 - Campus Development of New Proposal

#### **Department/Division**

Generate curricular description (ideas may by initiated at other levels) Academic and disciplinary integrity

#### **College/Division**

Resource requirements

Role in College/Division program portfolio

#### Faculty Governance

Curricular integrity

Relationship with other campus programs

#### **Chancellor/Vice Chancellors**

Resource adequacy

Fit to campus mission and priorities

Facility, enrollment and resource planning needs

Result: Proposal to System/Board

# 3 - New Program Proposal

- Executive summary of the program
- Why is the program a priority for the unit; what needs/goals does it meet?
- What are the expected enrollments in the program? From what sources?
- What operating and instructional resources will the program need and where will they come from? What are the program's facilities needs?
- What impact will developing this program have on resource (re)allocation in the unit?
- What risks are associated with the program?
- Program details (curriculum, staffing, assessment, accreditation, etc.)

#### 3a - Action Memo from Chancellor

Make the case to the System/Board for establishing this program

- Summarize the program and its role
- Why is this a priority for the campus/college
- Why should this program be established here?
- What need does it fill?
- How does it fit the campus mission as outlined in the IAFP?
- Summarize succinctly enrollment projections/achievements and planned/realized resource requirements and sources

### 4 - Provisional-to-Established Proposal

- Executive summary of the program
- Reassess fit to campus mission, priorities and plans
- Re-evaluate if need/demand continues to justify program
- Evaluate academic integrity (program reviews, outcomes assessment, accreditation)
- Compare proposed to actual outcomes for instructional and operating resource requirements, enrollment, and completion results and facility needs
- Evaluate program graduates' placement and success
- Assess integration with other programs on campus and in the system
- Reassessment of program risks and their management

#### 4a - Action Memo from Chancellor

- Summarize the program's role and its evolution since inception
- Why will this continue as a priority for the campus/college?
- Will it continue to meet needs and generate demand?
- Does the program integrate well with programs on this and other campuses? How will developments at other campuses affect this program in the future?
- Assess how well the program met proposed enrollments, completions operating and instructional resource and facility needs?
- What unexpected developments enhanced or challenged the program in its evolution?
- Defend the recommendation to make the program permanent.

# Sample List of Proposal for AY 2018-19

#### **New Programs**

- Mānoa: BS Engineering Science, BS Construction Engineering, BA Public Policy, MA Asian International Affairs, MS Finance, MS Information Systems, MS Marketing
- Hilo: BS Aeronautical Sciences
- West O'ahu: BAS Creative Media, BA Natural Sciences
- Kaua'i: AAS Building Construction Technologies

#### Provisional-to-Established

- Mānoa: BA Pacific Island Studies, BA/BS Biochemistry, BS Computer Engineering, BS Molecular Cell Biology, Doctor of Education, MS/PhD Marine Biology
- Hilo: BA Pharmacy Studies, PhD Pharmaceutical Sciences
- Hawai'i, Honolulu, Kaua'i, Maui, Windward: AS Natural Sciences
- Kaua'i: AS Business
- Kapi'olani: APC Culinary Management

# Program Approval: One Option for Discussion

Type of Program Proposal	Authorization to Plan	New Program	Provisional-to- Established
Capital-intensive (new program)	UH Officers/CCAO	BOR	BOR
Redirection or Modernization (new program)	UH Officers/CCAO	BOR	Delegated to the President
Modifications (existing program)	UH Officers/CCAO	Delegated to the President	Delegated to the President
Rapid Response (new program)	UH Officers/CCAO	Delegated to the President	BOR

NOTE: All program actions will be reported to the BOR in the Annual Report of Academic Program Planning