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## MAJOR CHOSEN: AIRCRAFT MAINTENANCE/ MISSIONARY AVIATION

FIVE YEAR PROGRAM

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### I. A BRIEF DESCRIPTION OF THE MAJOR

This major leads to a Bachelor of Science degree in Missionary Aviation as well as an Associate of Applied Science degree in Aircraft Maintenance. The flight courses provide ground and flight instruction for the Private Pilot Certificate followed by advanced training leading to the instrument rating and the Commercial Pilot Certificate. The training in aircraft maintenance will also prepare you for *Federal Aviation Administration* certification as an airframe and powerplant mechanic. The objective of this combined program is to train a missionary who can fly and maintain an airplane on the mission field. Courses in Bible and missions are included as an integral part of your preparation.

### II. COURSE HIGHLIGHTS

Here are some of the courses you will especially enjoy:

*Assembly and Rigging* In this class you will learn to rebuild an aircraft from the skeletal frame into a certified flying aircraft.

*Reciprocating Engines* You will learn to inspect, service, troubleshoot, overhaul, and repair reciprocating engines as well as remove and install engines on an airplane.

*Cultural Anthropology* This course will prepare you to understand the beliefs, values, and actions of third world cultures as well as modern societies. You and your classmates will choose a specific aspect of a foreign culture, evaluate it, and then discuss the potential problems and opportunities it presents.

*Instrument Ground School* In this course you will study the theory of instrument flying, rules and procedures governing instrument flight, operational techniques including en route navigational aids, instrument approach procedures, distance measuring equipment, radio and radar, and emergency procedures.

*Advanced Cross-Country Flight* You will receive instruction for day and night cross-country flights, including flights into high-density airports and mountain flights. You will learn instrument procedures in an airplane and in a flight-training device. Some cross-country flights will be solo.



### III. A TYPICAL YEARLY COURSE SEQUENCE

This is a suggested program of study for you. Other refinements to your program can be made when you consult your faculty advisor at the time of your enrollment.

You will notice that some courses are listed as electives. These electives give you the opportunity to tailor your program by selecting courses you would like to take for your own personal enjoyment.

#### *Freshman*

Orientation .....	1	Orientation .....	1
English .....	3	English .....	3
Methods of Bible Study .....	2	The Gospels .....	2
Aircraft Drawings .....	1	Basic Electricity .....	3
Ground Operation & Servicing .....	1	Fluid Lines & Fittings .....	1
Cleaning & Corrosion Control .....	0	Materials & Processes .....	2
Maintenance Forms & Records .....	0	Applied Physics .....	<u>3</u>
Maintenance Publications .....	1	Total .....	15
Mechanic Privileges/Limitations Plus Review ..	1		
Applied Math .....	3		
Weigh and Balance .....	<u>1</u>		
Total .....	14		

#### *First Summer*

Reciprocating Engines .....	5	Turbine Engines .....	4
		Engine Inspection .....	<u>1</u>
		Total .....	5

#### *Sophomore*

Primary Ground School .....	2	Basic Ground School .....	2
Solo Flight .....	1	Private Pilot .....	1
Basic Speech Skills I .....	3	Basic Speech Skills II .....	3
The Pentateuch .....	3	Christian Doctrines .....	3
Christian Doctrines .....	3	Engine Electrical Systems .....	2
Engine Instrument Systems .....	1	Fuel Metering Systems .....	2
Engine Fire Protection Systems .....	0	Engine Fuel Systems .....	1
Lubricating Systems .....	1	Induction System .....	1
Ignition Systems .....	2	Engine Cooling Systems .....	1
Propellers .....	2	Engine Exhaust Systems .....	0
Unducted Fans .....	<u>0</u>	Auxiliary Power Units .....	<u>0</u>
Total .....	15	Total .....	16

#### *Second Summer*

Sheet Metal Structures .....	3	Aircraft Wood Structures/Covering/Finishes ....	4
Assembly & Rigging .....	<u>2</u>	Cabin Atmosphere Control Systems .....	<u>1</u>
Total .....	5	Total .....	5



*Junior*

Cross-Country Flight.....	2	Advanced Cross-Country Flight .....	2
Aviation Meteorology .....	2	Practical Psychology .....	2
Christian Family Forum .....	1	Personal Evangelism .....	1
Biblical Missions .....	2	Biblical Missions .....	2
Principles of Leadership .....	1	Principles of Leadership .....	1
Welding.....	1	Airframe Inspection .....	1
Aircraft Instrument Systems .....	0	Aircraft Landing Gear Systems .....	2
Aircraft Fuel Systems.....	1	Hydraulic & Pneumatic Power Systems .....	3
Aircraft Electrical Systems .....	3	Communication & Navigation Systems .....	1
Ice- & Rain-Control Systems .....	1	Position & Warning Systems .....	0
Fire Protection Systems .....	1	Bible Elective .....	<u>2</u>
Bible Elective .....	<u>2</u>	Total .....	<u>17</u>
Total .....	17		

*Third Summer*

Bible & Practical Problems .....	2
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*Senior*

Composition & Rhetoric .....	3	Missions/Ministry of Prayer.....	2
Computer Applications I .....	3	Aviation Safety and Survival .....	2
Music/Youth Ministries .....	2	Commercial Ground School.....	3
Instrument Ground School.....	3	Commercial Maneuvers .....	1
Instrument Flight.....	2	Baptist or Christianity Elective .....	2
Science, Mathematics, or Computer Science .....	3	Science, Mathematics, or Computer Science .....	3
Sophomore Bible Elective.....	<u>1</u>	Upper-Level Bible Elective.....	<u>2</u>
Total .....	17	Total .....	15

*Fourth Summer*

Bible & Practical Problems .....	2
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*Fifth Year*

History of Civilization .....	3	History of Civilization.....	3
Cultural Anthropology .....	3	Fundamentals of Geography .....	3
Heritage of Fundamentalism/Cults.....	2	Biblical Church Leadership.....	2
Commercial Preparation .....	1	Principles and Methods of Missions .....	3
Speech .....	3	Women in Missions .....	2
Psychology Elective.....	3	Upper-Level Bible Elective .....	2
Upper-Level Bible Elective.....	<u>2</u>	Upper-Level Bible Elective .....	<u>2</u>
Total .....	17	Total .....	17

**IV. FACILITIES, EQUIPMENT, AND OPPORTUNITIES**

A summer mission opportunity will be available. You may qualify to spend two months of the summer in flight operations in support of the Canada mission team or one month with the Mexico mission team from the University. This experience will provide you with practice flying in the bush areas of Canada and Mexico.



**The aircraft** operated by the University include a fleet of diverse training airplanes. Single-engine training is accomplished in Diamond aircraft and a Cessna 172RG. The Diamond Eclipse DA20 has GPS navigation capability and is used for primary and advanced training. The Diamond Star DA40 has the new “glass panel” technology and is used for advanced and instrument training. The Cessna 172RG with retractable landing gear is used for instrument and commercial flight training. Optional multi-engine training is accomplished in a high performance Piper Aztec. Fully equipped instrument flight simulators for single and multi-engine are available for instrument training and proficiency.

**The flight training department** operates in an office and hangar facility on the Greenville Downtown Airport, just 3 miles from campus. You will have access to satellite weather service, computer test preparation, and audio-visual courses. Your opportunities include cross-country flying, instrument flying, mountain flying, night flying, and flying into grass airstrips.

**You will study in spacious** hangar and classroom facilities designed for aircraft maintenance located at the Greenville Downtown Airport just 3 miles from the main campus. These facilities have 12,000 square feet and are well equipped for all phases of aviation maintenance instruction.

**Opportunities for "hands on" experience** will include working on a Cessna 210 and a twin-engine Turbine Aero Commander. Opportunities to work on other aircraft owned by Bob Jones University are offered through internships.

**In addition to class work**, you will have opportunities for field trips to airports, commercial repair facilities, and parts manufacturing plants; and you will also be able to share experiences with missionary pilot mechanics who are home on furlough.

**In the Ministry Resource Center** you will find a Christian periodical and tape library, duplicating equipment, complete topical files, and a wide variety of audiovisual materials and equipment. This laboratory is maintained for your class and extension use.

**Mission Prayer Band** is a campus organization designed to stimulate missionary zeal and vision. Students gather four times weekly to systematically pray for the needs of the missionary cause around the world, and to hear speakers challenge them on mission themes.

**Chapel** is a central feature of Bob Jones University. This 35-minute service is held every morning, Monday through Thursday. These services are a source of great inspiration to students. Four days a week the Chapel message is brought by the President or by selected speakers. Each Friday the Chapel period is devoted to the meetings of various literary societies.

**The extension program** provides for the development of student leadership and experience in various types of Christian ministries, such as church visitation, jail services, retirement home ministries, youth work, and child evangelism.

**Through the summer extension program** (Practical Evangelism), you will continue to receive guidance and practical experience in Christian service throughout the summer months. These courses carry two hours credit each summer, and you may take them wherever you may reside during the summer.



**Davis Field House**, with over 87,000 square feet and seating for 3,000 people, contains 4 full-sized courts; auxiliary courts; indoor and outdoor tracks; swimming pool; café; and a fitness center with fully-equipped exercise room, aerobic room, sauna, and whirlpool.

**Completely equipped computer laboratories** are available for your use. There are many academic computer labs conveniently located all over campus. They consist of various types of PCs, Apple PowerMacs, and laser printers and are all interconnected via a Novell computer network.

**The Mack Library**, with 90,000 square feet of floor space and seating for over 1,300 students, gives you access to 294,000 volumes, 1,100 current periodical subscriptions, and more than 17,000 music, speech, and language recordings. Mack Library offers access to over 65 electronic databases on the library web site. An interlibrary loan program is available through OCLC, a national database, for books not held in our library. Other prominent features include the Jerusalem Chamber, a replica of the room in Westminster Abbey in London in which work was accomplished on the 1611 King James Bible, and the University Archives Room which displays materials about the Founder and history of the University.

**If you are planning to live on campus**, you will be glad to know that all of our residence halls are air-conditioned, have wall-to-wall carpeting, and have a phone in each room. You will be able to make long-distance calls directly from your room and have them automatically placed on your school bill. Computer network connectivity is available in all residence halls, as well.

All of our classrooms are air-conditioned. The Dining Common serves 8,500 delicious meals a day, and the Snack Shop and Bookstore in the Student Center carry just about anything you'll need.

You will find the finest Christian young people in the country are your fellow students, and without trying too hard, you may end up making a life-long friend!

## V. ABOUT THE FACULTY

All of our School of Religion faculty members have extensive preaching experience in local churches, and a majority of them have pastoral experience. Several are currently serving as pastors of small (and some not so small) churches on the weekends. They know the problems of local churches, and they are sympathetic to the needs of pastors.

The faculty of the School of Religion are highly qualified. The combined teaching experience of the full-time faculty averages close to 20 years per teacher. All of the full-time faculty members have master's degrees, and almost 90 percent have earned doctorates.

Several members of the faculty are currently involved in writing material for Christian school textbooks, religious periodicals, and journals.



The aviation faculty are also highly qualified. They have experience flying and instructing in various environments including military, corporate, charter, and missionary flying. One faculty member is authorized by the FAA as *Designated Pilot Examiner* to give flight tests and issue Pilot Certificates for Private, Instrument, Commercial, Multi-engine, Airline Transport Pilot, and Flight Instructor. One of these faculty members will be your advisor in the fourth and fifth year of your program.

Our faculty members in the aircraft maintenance program have extensive experience as FAA licensed mechanics and in various areas of aircraft maintenance. They have an average of more than 20 years experience in aircraft maintenance and more than 10 years experience in teaching aircraft maintenance. They are qualified for the *Inspection Authorization (IA)* for annual inspections, major repairs, and alterations, and one is authorized by the FAA as *Designated Mechanic Examiner* to give the oral and practical tests and issue Mechanic Certificates for Airframe and Powerplant.

## VI. CAREER OPPORTUNITIES AND PLACEMENT

The School of Religion extension office will assist you in finding positions for Christian service. Pastors, camp directors, mission board directors, and other recruiters often visit the campus to find personnel for their ministries. Graduates can be found serving the Lord in a wide variety of fields--from teaching to working on the mission field.

Liaison is maintained with the major mission boards and with the commercial aviation community. The aviation faculty are available to assist you in finding the right ministry opportunity after graduation.

Our graduates currently work in these areas:

U.S. Air Force	Airline pilot
Air taxi owner/operator/pilot	Corporate pilot
Aircraft mechanic	Flight Instructor
Mechanic Instructor	Missionary Pilot/Mechanic

There are BJU aviation graduates who have served or are now serving on the mission fields of Puerto Rico, Canada, Alaska, Mexico, Honduras, Africa, Brazil, Korea, Japan, and the Pacific Islands of Truk, Fiji, and Ponape.

## VII. BJU: AN AFFORDABLE EDUCATION

Enclosed is an expense sheet detailing the cost of attending Bob Jones University. When you compare our charges to those of other private colleges, we think you will be pleasantly surprised. We believe we offer a student more value for his dollar than anyone else in America. And to help you see how affordable "the Opportunity Place" can be for you, we have enclosed a financial aid brochure that you can use to evaluate your own situation. Your Admissions Counselor or the Director of Student Financial Aid would be happy to discuss this with you if you have any questions.



### **HOW TO TAKE THE NEXT STEP . . .**

If you can see yourself in the career described in the profile, then a great opportunity awaits you at Bob Jones University. It is the opportunity for the premier Christian college experience in all the world. It is the opportunity for learning, for fun, and for developing new friendships. It is the opportunity to prepare for a lifetime of service for the Lord . . .

The Opportunity Place . . . God's Special Place for You.