CIRRUS SR20

Boeing Employees Flying Association

Aircraft and Training Overview

Howard Wolvington/Charles Mallory

BEFA CIRRUS Check Pilots

Objectives of This Presentation

- Provide some reasons to invest in SR20 training
- Provide a high level overview of the aircraft
- Point to resources which further describe it
- Identify Pre-Training Activities
- Communicate the Training Process
- Provide a basic understanding of the Avidyne IFD 440s

Why ? – Howard's 11 "F"s

- Futuristic
- Fantastic Fit, Finish and Feel
- Fast
- Freedom with Fancy Avionics (TAA Aircraft)
- Family (Safety)
- Fun
- aFfordable

Cirrus SR20 N662AJ
Avidyne 440 NAV/COM/GPS Upgrade

Training Advantages

- Low wing, streamlined airframe characteristics
- Higher cruise speeds with lower fuel burn
- Requires `Thinking Ahead' and energy management
- Technically Advanced Aircraft (MFD. PFD, Autopilot)
- Modern FMS architecture similar to commercial aircraft
- IFD 440s Integrate well with STEC-55 Autopilot
- Enroute VNAV capable
- 2-way Wi-Fi connection with Foreflight for flight plans

Cirrus SR-20 target audience?

- Instrument rated members looking to commercial flying (FMS type interface and higher speeds)
- Instrument and commercial students (TAA Aircraft)
- Private pilots desiring aircraft with better cruise performance and schedule availability.
- Upgrade step before SR-22T
- Members and family members with safety concerns (CAPS)

Presentation Agenda

- SR20 W&B and Performance capabilities
- SR20 Systems overview
- SR20 Avionics overview
- How to prepare for BEFA SR20 Transition Training
- Avidyne IFD 440 Systems and Training Overview

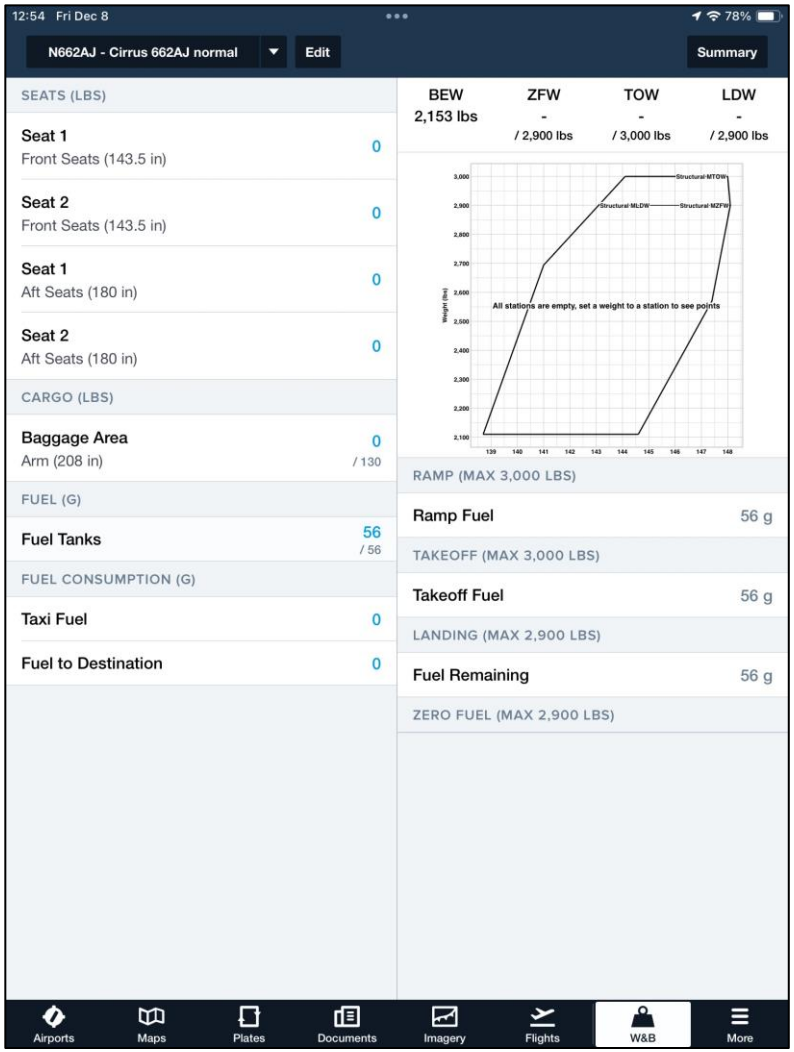
Weight & Balance

A/C Tail # :	N662AJ	**A/C Make :**	CIRRUS
Register Name :	BOEING EMPLOYEE FLYING ASSOCIATION	**A/C Model :**	SR20
Name 2 :		**A/C Serial # :**	1632
Address 1 :	840 W PERIMETER ROAD	**WO Ref # :**	17086
Address 2 :		**WB Date :**	Feb-08-2023
City, State, PC :	RENTON, WA 98057-5346	**WB ID # :**	580

Previous data taken from document dated Aug-10-2022 Previous useful load = 843.59

Model #	Description (LB / IN)	Weight	CG/Arm	Moment
	Previous data ->	2156.41	141.39	304905.31
REMOVED ITEMS ----------				
16665-002	XM RCVR	-1.70	110.00	-187.00
FLIGHT STREAM 210	WIRELESS	-0.27	107.00	-28.89
GDL-88	ADS-B	-3.70	105.00	-388.50
GNS-430W	WAAS GPS/COM/NAV/MAP	-5.15	136.20	-701.43
GTX 327	TRANSPONDER	-3.30	138.00	-455.40
REMOVED SUB TOTAL	5 Items @	-14.12	124.73	-1761.22
INSTALLED ITEMS ----------				
AXP340	TRANSPONDER	3.26	136.00	443.36
IFD440	GPS/COM/NAV	5.16	122.40	631.58
SKYTRAX200	REMOTE UAT IN	2.00	105.00	210.00
INSTALLED SUB TOTAL	3 Items @	10.42	123.32	1284.94
NEW DATA >>	NEW USEFUL LOAD = 847.29	2152.71	141.42	304429.03

Useful load is close to that of a 172S but cruise performance is 10 kts faster with less fuel burn than a 182.



Performance

Cruise Performance

- At 6000 P.A. and 70% power produces nearly 150KTAS at 11.1 GPH

Cruise Performance

Conditions:

- Mixture ..... Best Power
- Cruise Weight..... 2600 LB
- Winds ..... Zero

Note: Subtract 10 KTAS if nose wheel pant and fairing removed. Lower KTAS by 10% if nose & main wheel pants & fairings removed. Cruise Pwr above 85% not recommended.

Example:

Outside Air Temp 29° C
RPM 2700 RPM
Cruise Press Alt 8000 FT

% Power (22.2 MAP) 73%
True Airspeed 154 Knots
Fuel Flow 11.4 GPH

2000 Feet Pressure Altitude

		ISA - 30° C (-19° C)			ISA (11° C)			ISA + 30° C (41° C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	27.8	101%	160	16.0	95%	160	15.0	91%	157	14.2
2500	27.8	90%	154	14.1	85%	154	13.4	81%	151	12.9
2500	26.6	85%	151	13.4	80%	151	12.8	76%	148	11.7
2500	25.4	80%	147	12.7	75%	147	11.6	72%	144	11.3
2500	24.1	74%	143	11.5	70%	143	11.1	67%	140	10.7
2500	22.9	69%	139	11.0	65%	139	10.6	62%	136	10.2
2500	22.0	65%	136	10.5	62%	136	10.2	59%	133	9.9
2500	19.7	55%	127	9.5	52%	127	9.20	50%	124	8.9

4000 Feet Pressure Altitude

		ISA - 30° C (-23° C)			ISA (7° C)			ISA + 30° C (37° C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	25.8	94%	159	14.8	89%	159	14.4	84%	157	13.4
2500	25.8	84%	153	13.3	79%	153	12.7	75%	150	11.7
2500	24.8	80%	150	12.7	75%	150	11.6	72%	147	11.2
2500	23.6	75%	146	11.5	70%	146	11.1	67%	143	10.8
2500	22.3	69%	141	10.9	65%	141	10.5	62%	138	10.2
2500	21.0	63%	136	10.3	60%	136	10.0	57%	133	9.7
2500	19.8	58%	131	9.8	55%	131	9.4	52%	129	9.2

6000 Feet Pressure Altitude

		ISA - 30° C (-27° C)			ISA (3° C)			ISA + 30° C (33° C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	24.0	88%	159	13.8	83%	159	13.1	79%	156	12.6
2500	24.0	79%	152	12.0	74%	152	11.5	71%	149	11.1
2500	23.0	74%	148	11.5	70%	148	11.1	67%	145	10.7
2500	21.8	69%	144	11.0	65%	144	10.6	62%	141	10.2
2500	20.8	65%	140	10.4	61%	140	10.0	58%	137	9.7
2500	19.4	59%	134	9.8	55%	134	9.5	53%	131	9.2

Figure 5-16
Sheet 1 of 2

Limitations

Maximum Takeoff Weight: 3000 lbs.

Maximum Landing Weight: 2900 lbs.

N662AJ Empty Weight: 2153 lbs.

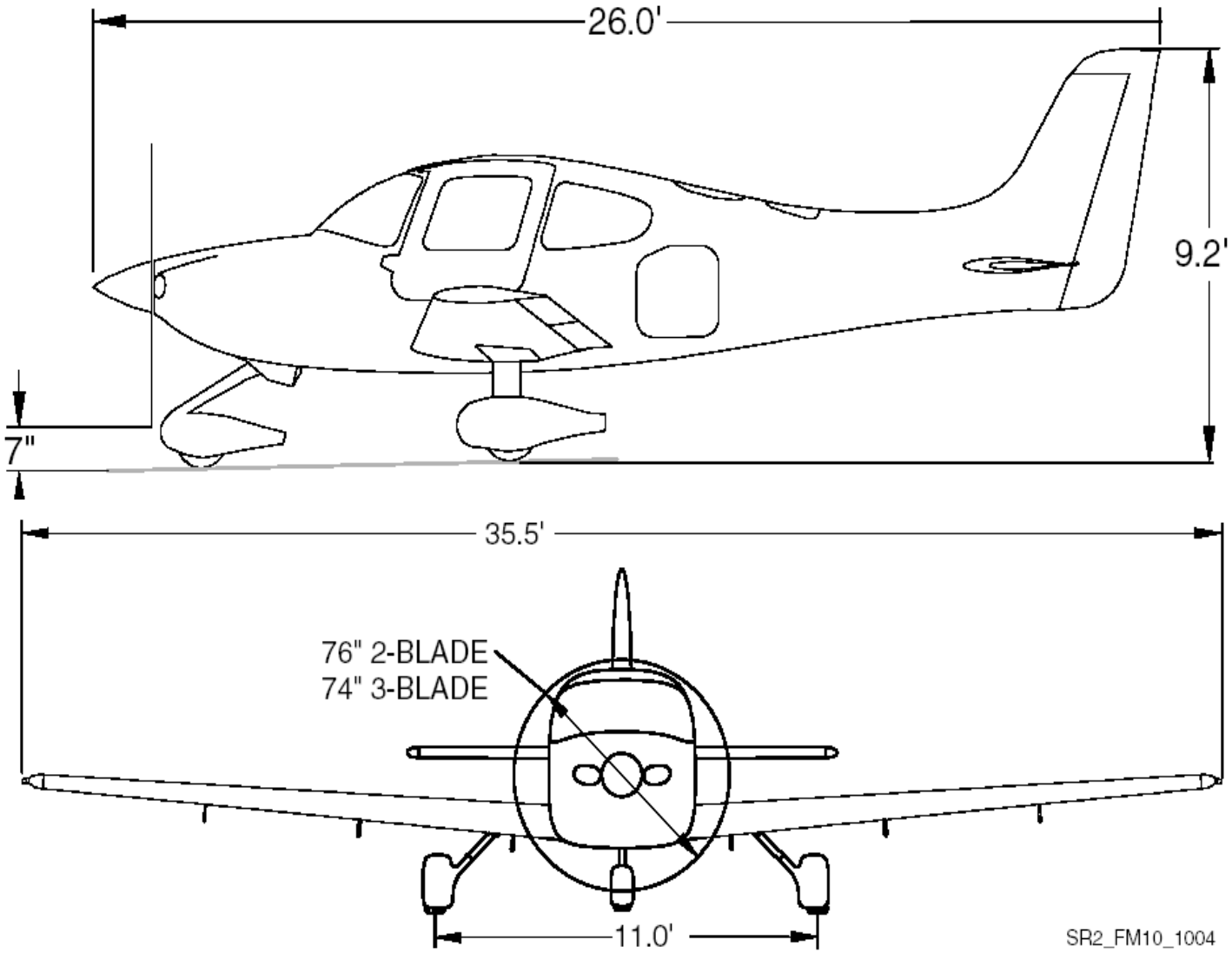
N662AJ Useful Load: 847 lbs.

N662AJ Passenger/Baggage @ full fuel: 511 lbs.

Maximum Operating Altitude 17,500 feet msl

Not approved for known ice or aerobatics

Dimensions



Flight Controls

- Controls actuated through use of side control yokes
- System uses a combination of push rods, cables and bell cranks for control actuation
- Aircraft trim uses hat switch for both aileron and elevator trim, as well as autopilot disconnect
- Pilots feels pressure against trim springs as well as air loads

Rudder System

- Incorporates a rudder-aileron interconnect
- Rudder deflection will provide a maximum of 8° down aileron travel at full deflection
- Aileron actuation will not cause rudder deflection
- Most noticeable during high power/low speed operations and taxi operations

Nose Gear

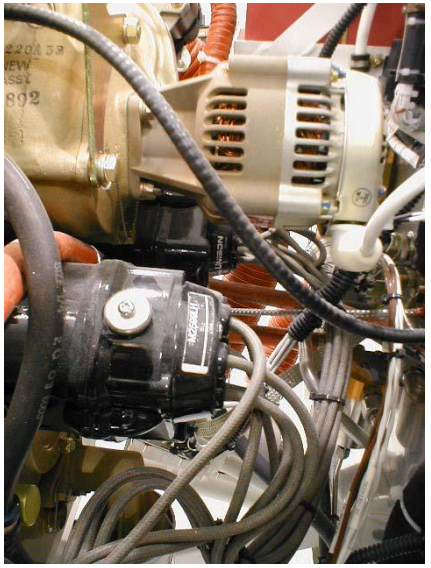
- Constructed of tubular steel
- Attached to the engine mount
- Nose wheel is free castering
  - 216° of travel (108° either side of center)
- Aircraft is controlled directionally through differential braking
- Nose wheel tire
  - 5.00 x 5
  - Inner tube type

Taxiing and Braking Techniques

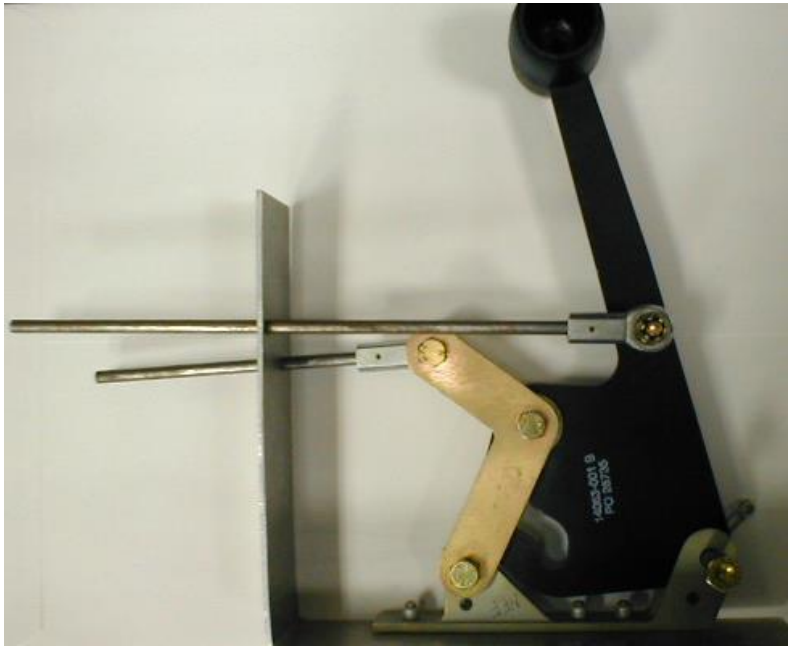
- CIRRUS aircraft requires a combination of rudder and differential braking for directional control on the ground.
- Use the least amount of brake pressure to maintain directional control during the taxi.
- Use power to control speed during the taxi.
  - Reduce power to slow down and then apply brakes as necessary.
- Avoid taxiing at high power settings and speeds.

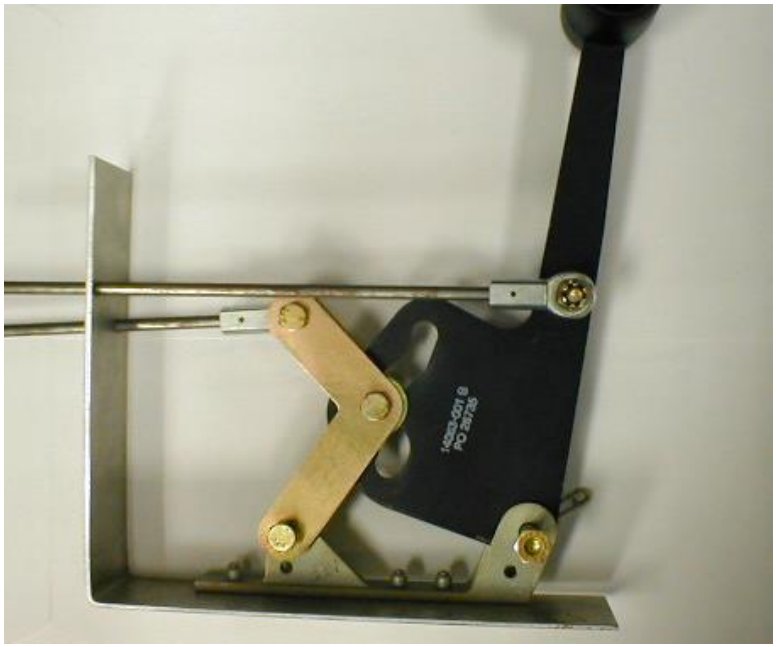
Engine

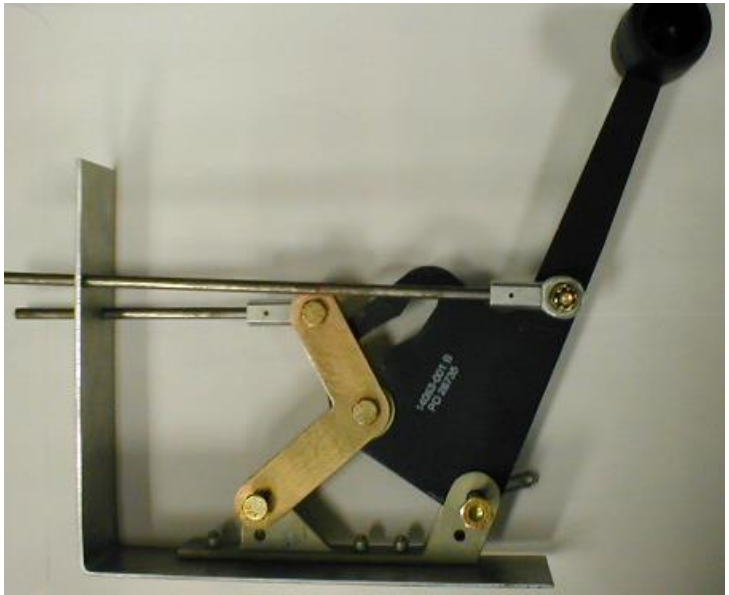
- Powered by a Teledyne Continental IO-360-ES engine
  - Six cylinder
  - Normally aspirated
  - Fuel injected
  - 200 horsepower @ 2700 RPM
  - 2000 Time Between Overhaul (TBO)
- Dual magneto ignition system



Throttle Linkage



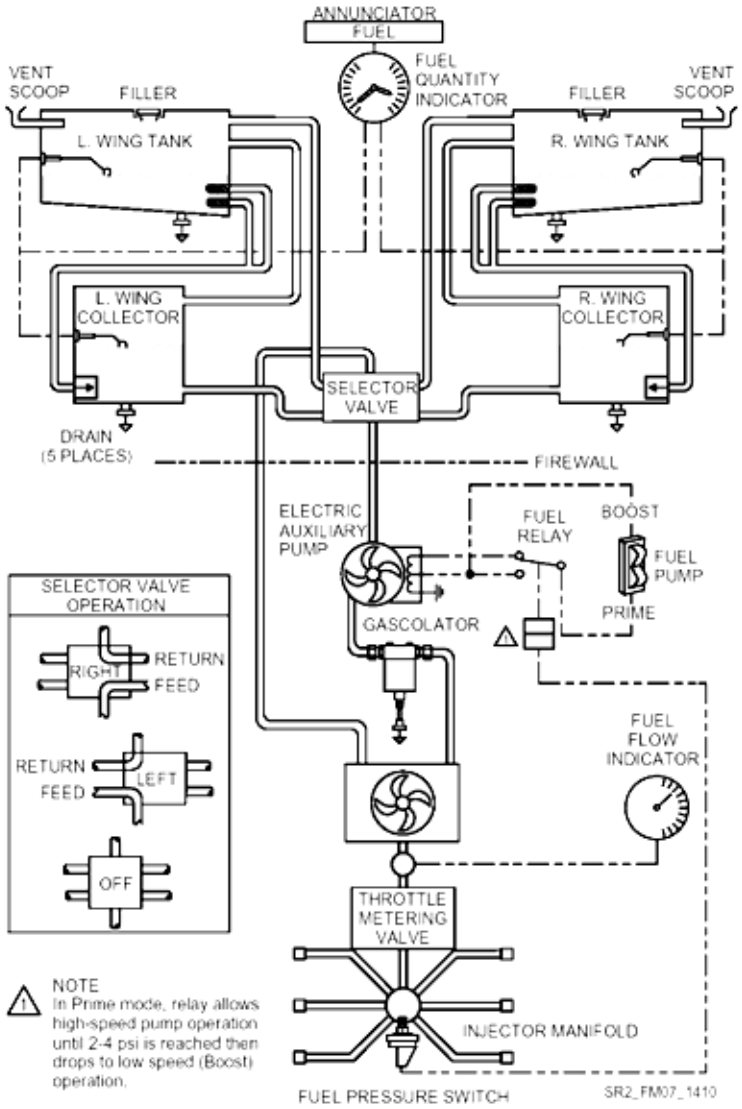




A cam system on the throttle linkage controls propeller RPM throughout the throttle range.

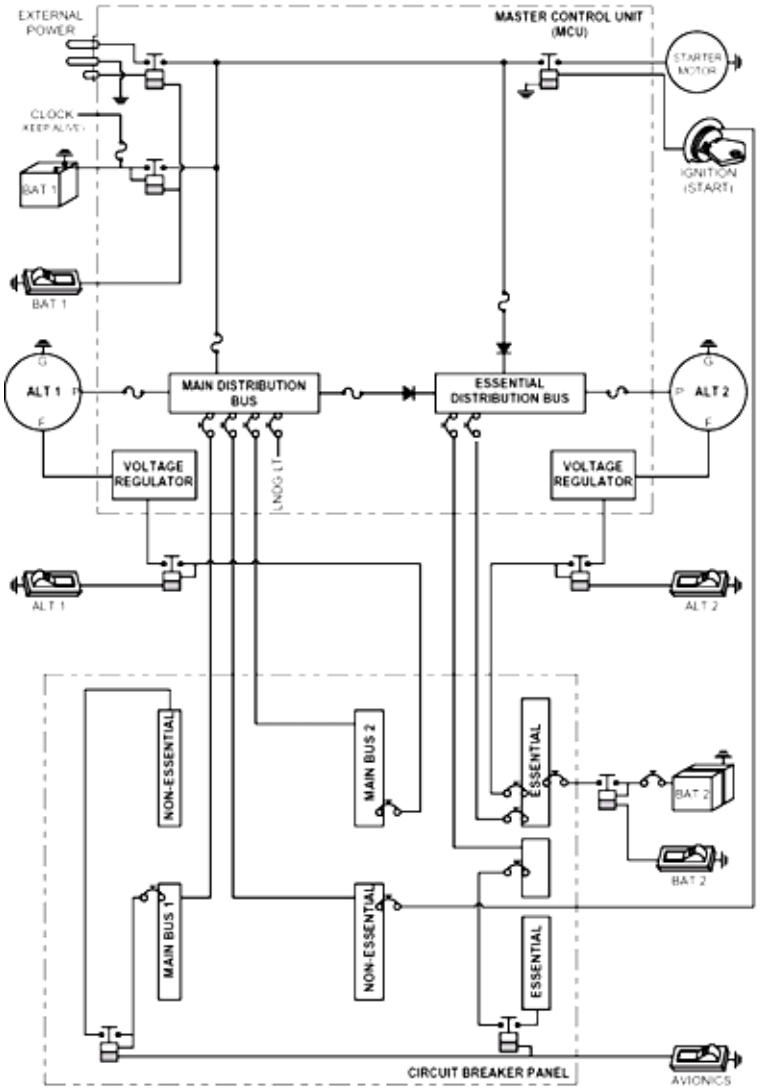
Fuel System

- Wing Tanks (L/R)
- Collector Tanks (L/R)
- Quantity Indicator
- Selector Valve
- Electric Fuel Pump
- Gascolator
- Engine Driven Fuel Pump
- Fuel Flow Indicator
- Throttle Metering Valve
- Injector Manifold
- 56 Gallons Usable Full Fuel
- 12 Gallons/hour at 75% power



Electrical System

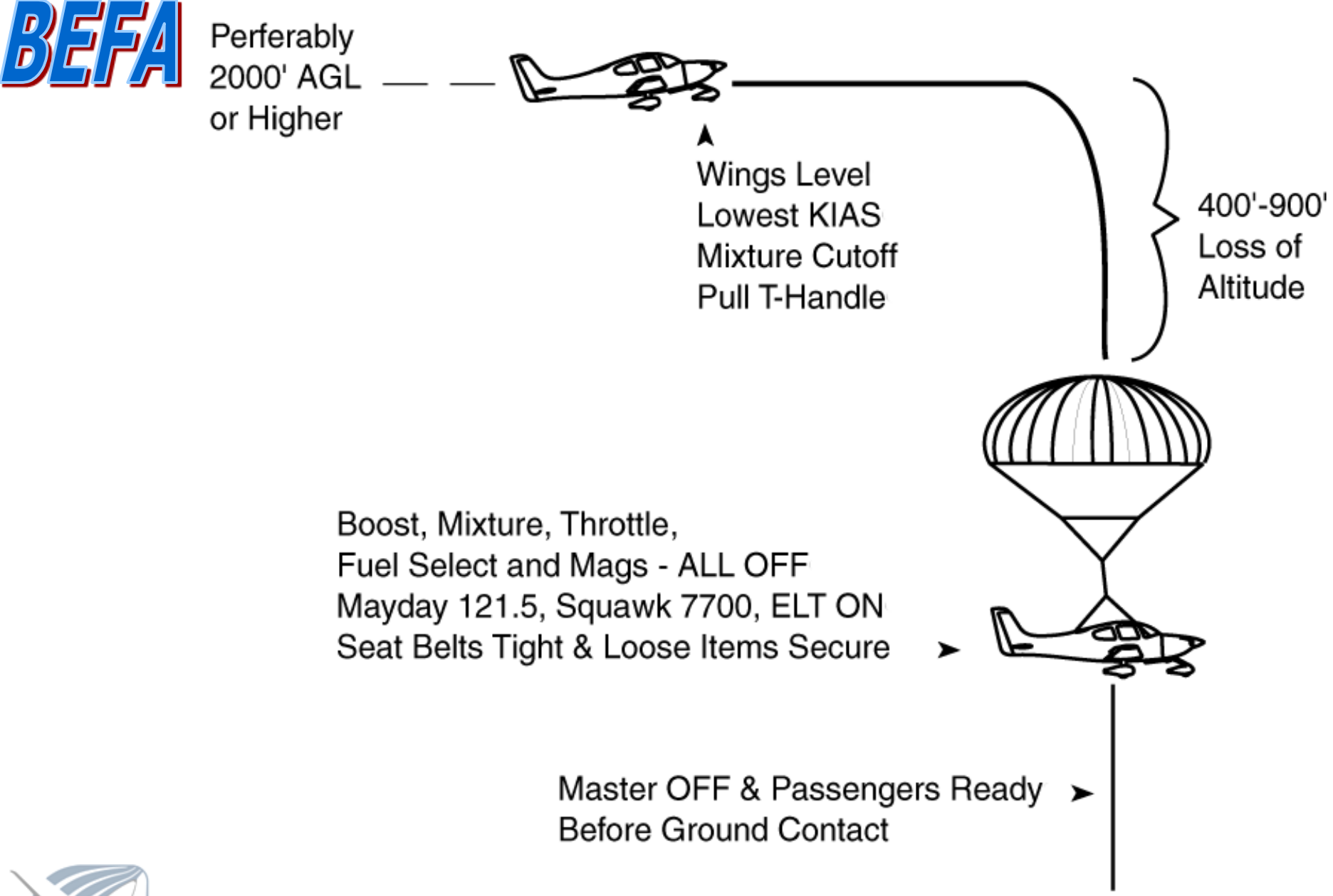
- Sources of electrical power connect to distribution buses located within the Master Control Unit
  - ALT 1 / BAT 1 deliver power to the Main Distribution Bus and through diode also to the Essential Distribution Bus
  - ALT 2 / BAT 2 deliver power to the Essential Distribution Bus
- PFD, GPS1 & Autopilot are on the EDB



CAPS Safety Features

- **CAPS: CIRRUS Aircraft Parachute System**

  The aircraft design advisory board included former military pilot and a pilot who had survived a mid-air collision
- **Inflatable shoulder harness restraints**
- **Seat pans are a crushable aluminum structure to further cushion vertical g forces.**


Perferably
2000' AGL
or Higher
Wings Level
Lowest KIAS
Mixture Cutoff
Pull T-Handle
400'-900'
Loss of
Altitude
Boost, Mixture, Throttle,
Fuel Select and Mags - ALL OFF
Mayday 121.5, Squawk 7700, ELT ON
Seat Belts Tight & Loose Items Secure
Master OFF & Passengers Ready
Before Ground Contact

How to Pull the CAPS Handle

Pull the activation T-handle from its receptacle. Pulling the handle removes it from the o-ring seal that holds it in place and takes out the slack in the cable (approximately two inches of cable will be exposed). Once the slack is removed, the T-handle motion will stop and greater force will be required to activate the rocket.

CAPS Deployment Procedure

CAPS Deployment Results

CAPS Scenarios

- **Mid-air Collision**
- **Structural failure**
- **Loss of Control**
  - **Control System Failure**
  - **Sever Turbulence Causing Upset**
- **Landing in inhospitable terrain**
- **Pilot Incapacitation**

Note - This list is not intended to be exclusive, but merely illustrative of the type of circumstances when CAPS deployment could be the only means of saving the occupants of the aircraft.

CAPS Considerations

- Aircraft is not approved for aerobatics
- The only demonstrated recovery method from a spin is CAPS deployment
- Occupants may be injured in a CAPS landing
- Aircraft may be destroyed in a CAPS landing

- Note: 26G front seats may be damaged by standing on seat or putting a knee on the seat – put only your butt on the seat!!!

Seat Belt Airbag Assembly

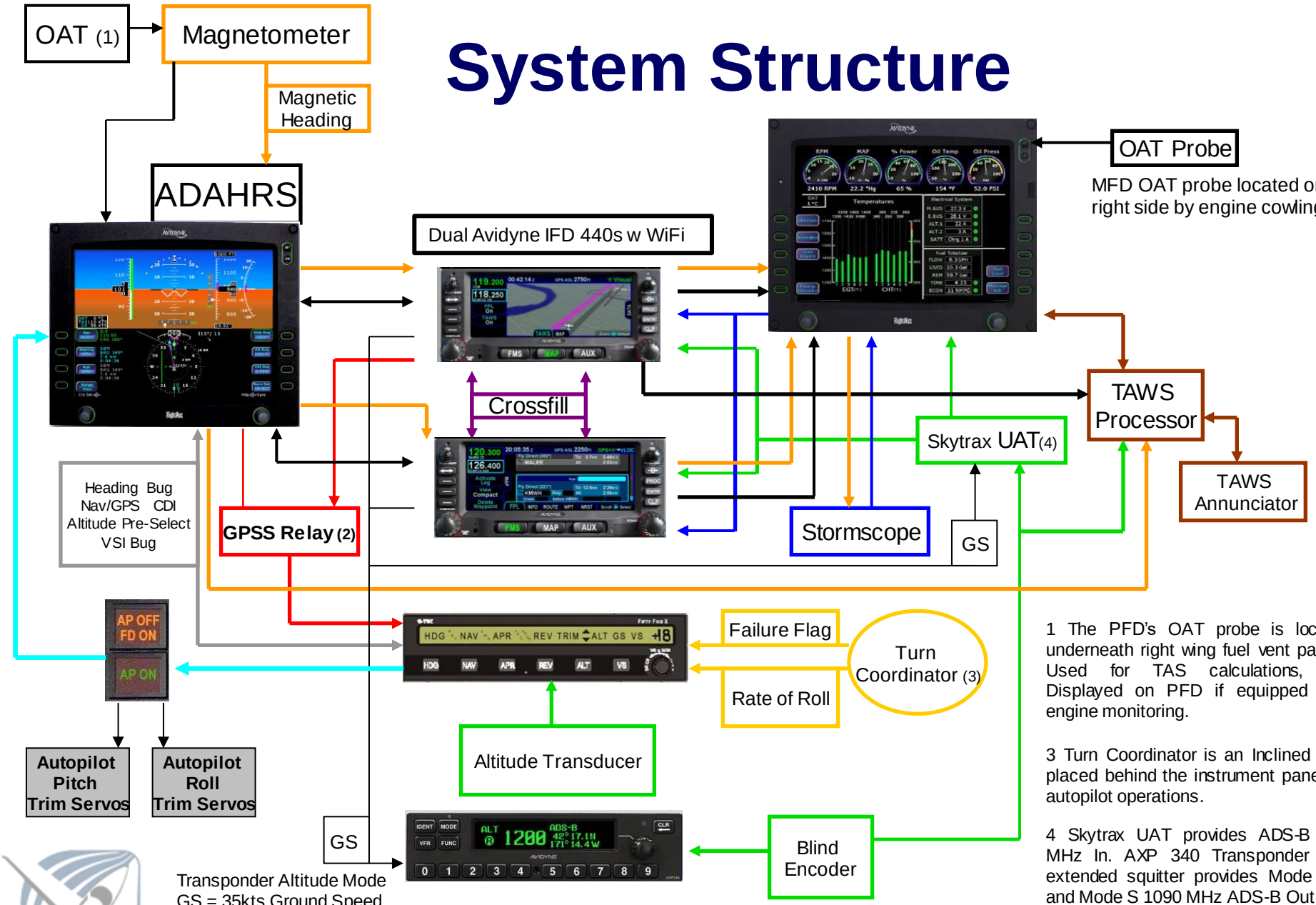
The four point restraint consists of the airbag unit and the gas hose attached to one side of the shoulder harness of restraint system. The opposite shoulder harness is padded for comfort and to match the airbag side.

The shoulder harness is tightened by an dual inertia reel; the lap belts are manually adjustable.

Avionics Summary

- Primary Flight Display (PFD)
- Multifunction Flight Display (MFD)
  - Moving map with flight plan
  - Flight plan and “Nearest” information
  - ADSB Weather displayed.
  - Cmax approach charts (Jeppesen)
  - Emax engine monitor
- Honeywell TAWS
- Garmin 340 Audio Panel
- Avidyne IFD 440 (2)
- S-tec System Fifty Five X Autopilot
- Avidyne AXP340 Mode S Transponder

System Structure



Transponder Altitude Mode
GS = 35kts Ground Speed
Activation Switch

2 Used during a Complete PFD Failure for proper autopilot operations. Relay is connected when PFD has no electrical power (CB's pulled).

1 The PFD's OAT probe is located underneath right wing fuel vent panel . Used for TAS calculations, not Displayed on PFD if equipped with engine monitoring.

3 Turn Coordinator is an Inclined gyro placed behind the instrument panel for autopilot operations.

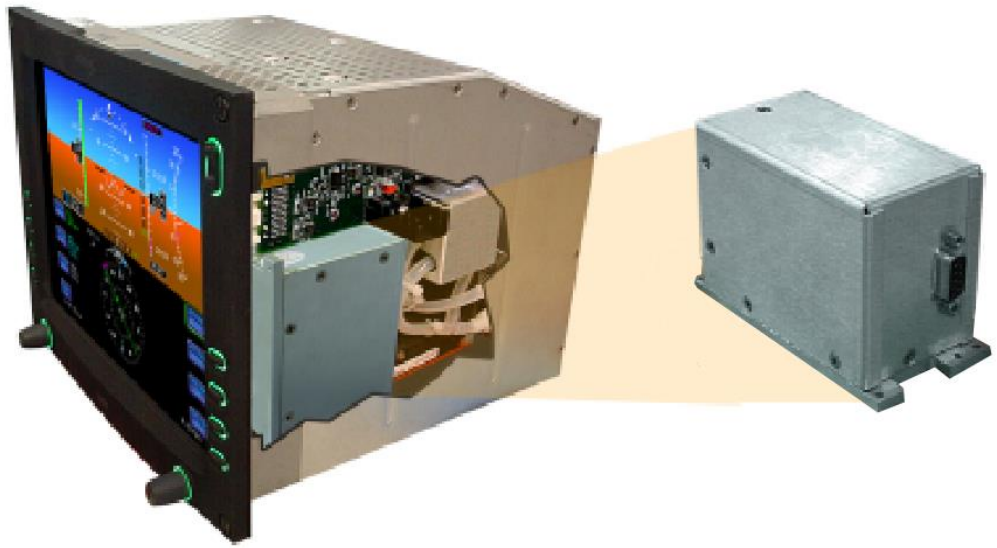
4 Skytrax UAT provides ADS-B 978 MHz In. AXP 340 Transponder with extended squitter provides Mode A/C and Mode S 1090 MHz ADS-B Out.

BEFA

AVIDYNE
HDG
ALT
3000 FT
FD
Power
SEA
DTK 210°
1.9 nm
0:00:50
337°/ 11
TAS 140 KTS
GS 135 KTS
OAT 6°C
Tach 2390 RPM
MAP 23.1 in-Hg
FF 11.8 GPH
Oil 53 PSI
Hdg Bug 260°
Alt Bug 3000 FT
VSI Bug 0 FPM
Baro Set 29.95"
Nav GPS1
Bearing OFF
Aux OFF
Range View
AP OFF
FD ON
FLIGHT DIRECTOR
DIM
TEST
INTERIOR LIGHTS
PITOT
DATALINK
NXR 5min
Lightning DSPLY OFF
Metar ON
Air/Sig SIGMET
Emerg. Checklist
View FORWARD
Declutter
BaseMap TERRAIN
Wx Ovly NEXRAD
Range
PILOT
COPILOT
MENU
FlightMax Entegra

Avionics: PFD

- The flat panel liquid-crystal display is integrated with an Air Data / Attitude Heading Reference System (ADAHRS)
- Magnetometer (Magnetic Heading information)
- Three axis solid state gyro and accelerometer system
- AHRS Provides:
  - Pitch
  - Roll
  - Yaw



Avionics: PFD

Primary Flight Display

- Upper Half of Display for basic flight instrument data
- Includes Autopilot Annunciations and steering bars.
- Lower Half has HSI and integral moving map
- Nav button switches primary source display
- Bearing and Aux buttons for RMI type display of secondary Nav sources
- Buttons for knob control of Hdg, Alt, VSI and Baro values

MFD: Engine Monitoring Fuel Page

Fuel Initialization Page

Displayed on startup or when the “Initial Fuel” button is pressed in the engine monitoring page.

The MFD will display the fuel initialization page and ask the pilot to input the amount of fuel added to the aircraft.

Buttons for "**Fuel Full**" and "**Fuel to Tabs**" are available to quickly set commonly used fuel amounts. In addition the right knob can be used to fine tune the amount of fuel added per gallon.

When the desired amount has been entered, pressing the "**Fuel Done**" button will exit the fuel initialization page.

Avionics: MFD

Multi-Function Display

- Map w Weather, Flight plan graphic display and Track information

MFD Terrain Warning Displays TAWS

- Displays automatically when triggered by proximity.

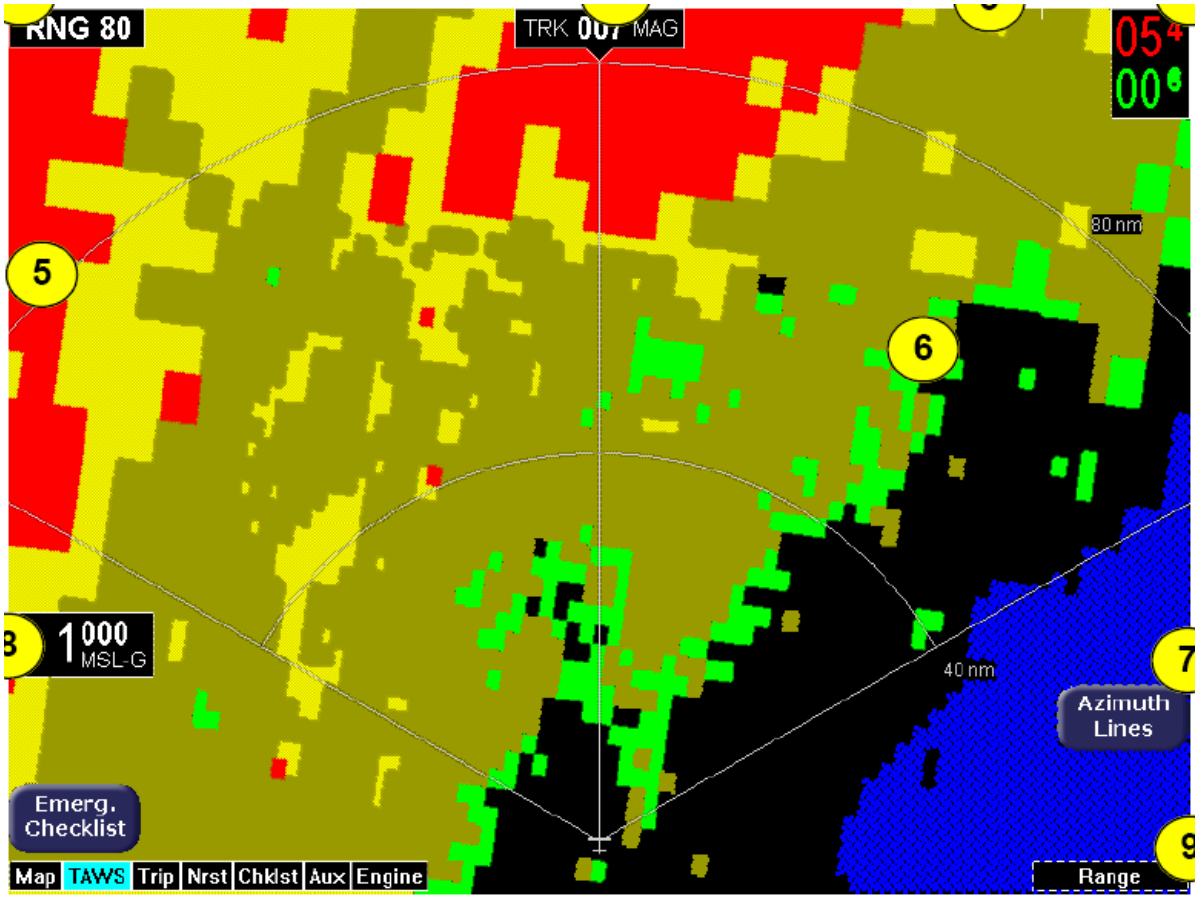
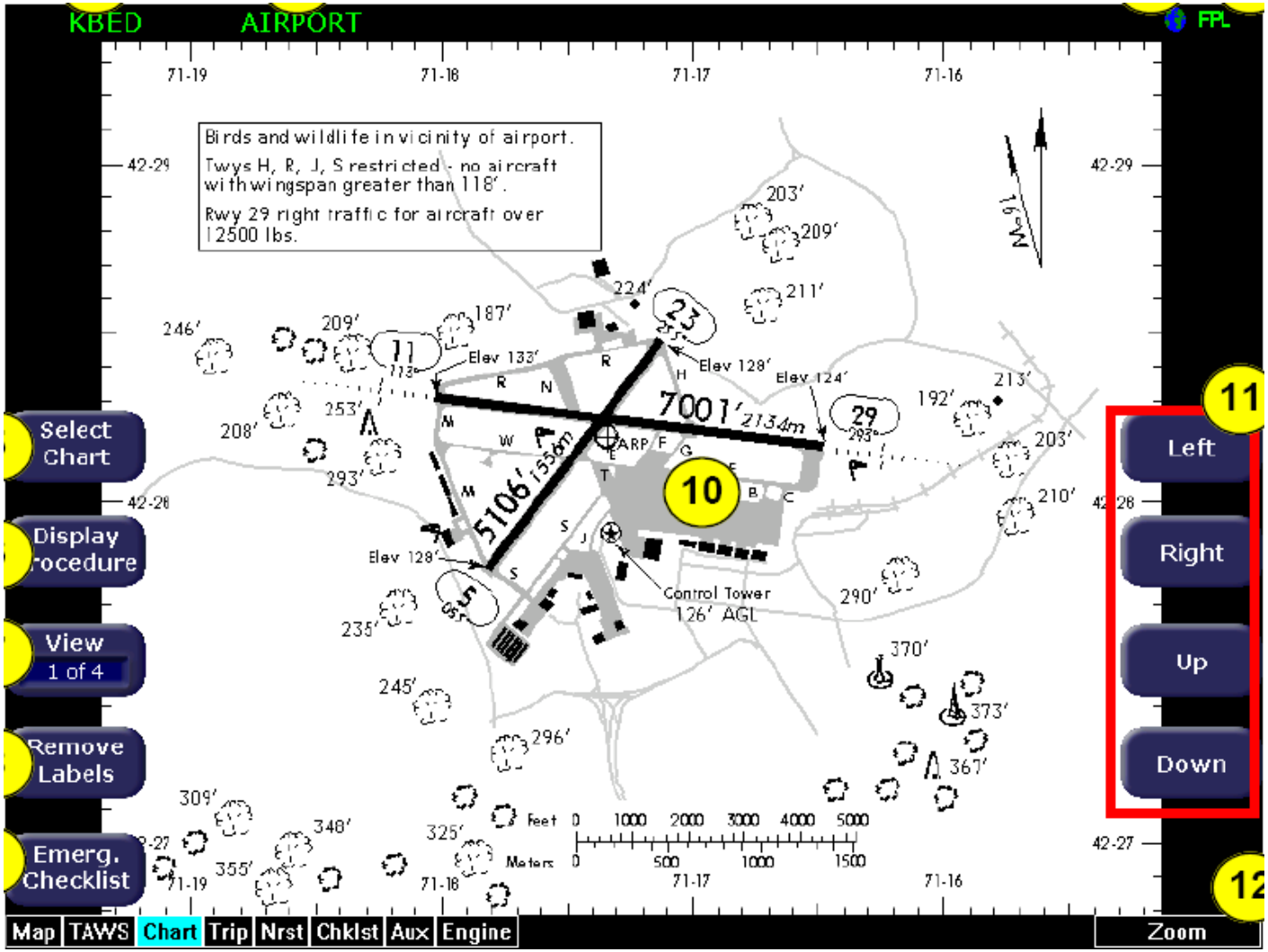


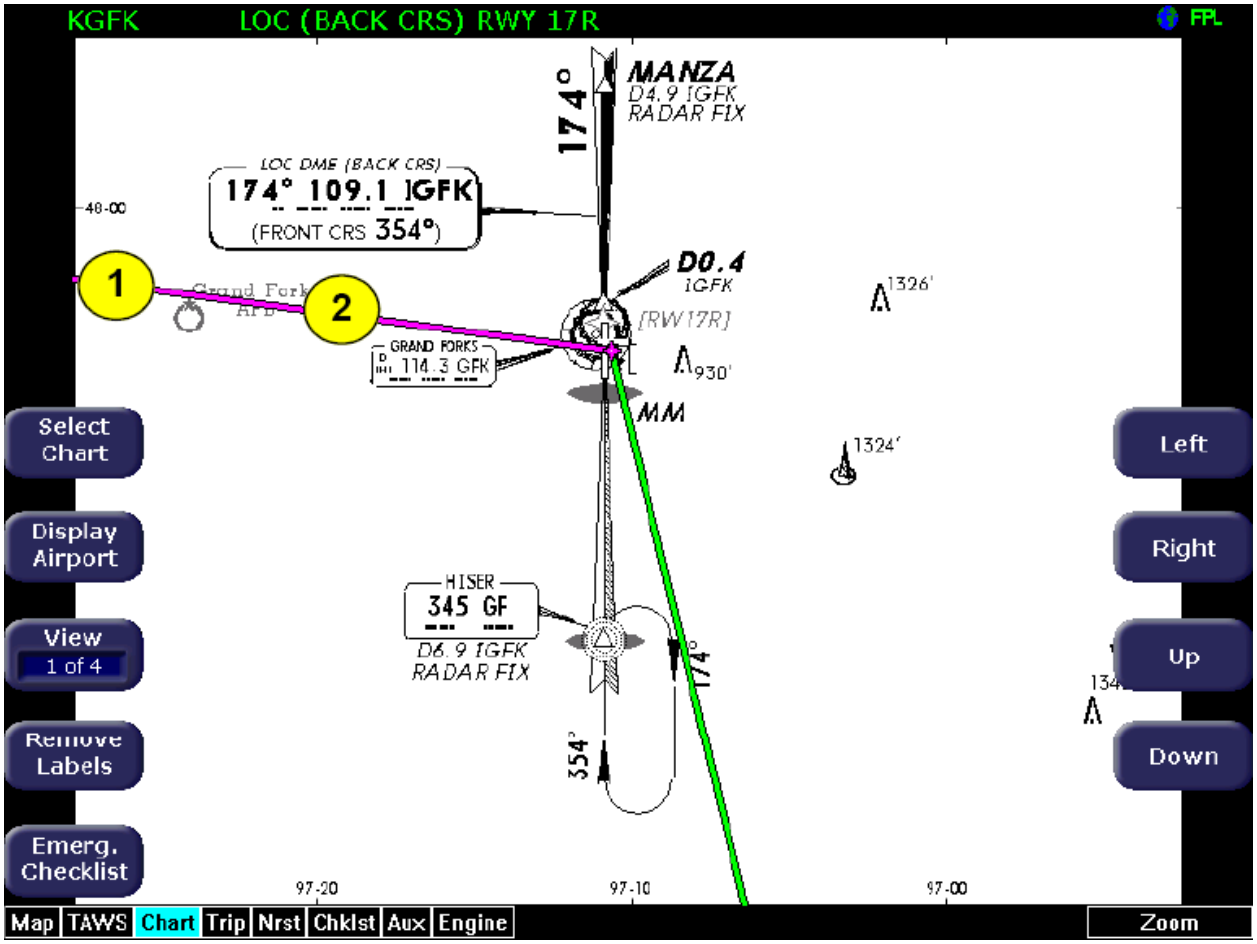
Chart Function

- Jeppesen Chart subscription
- Automatic display of taxi chart



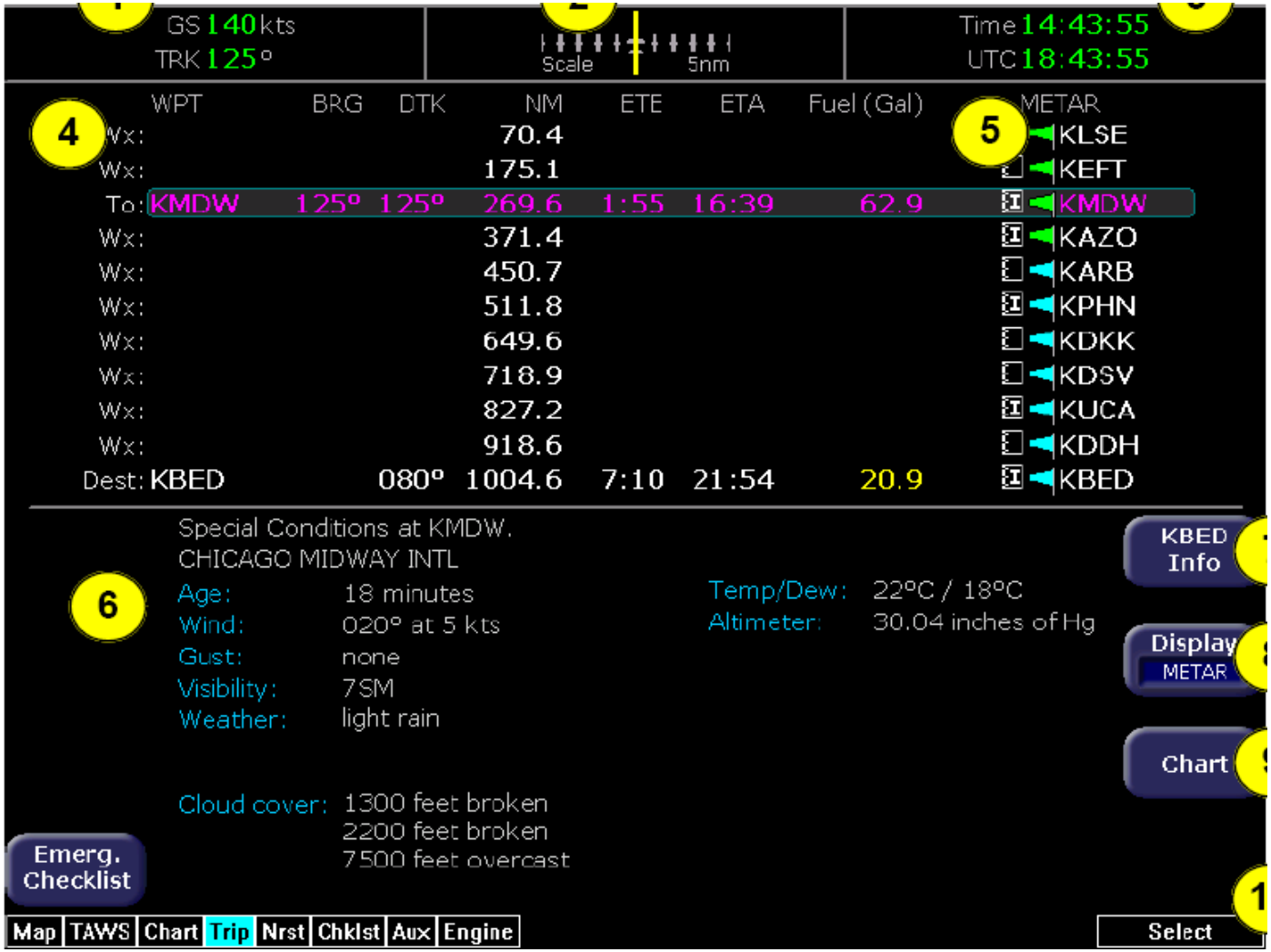
Map display of chart

- Flight plan track superimposed on chart
- Includes own ship and active leg diplayed



Trip information

- Displays current route from IFD 440s .
- More easily visible to pilot due to larger screen and location

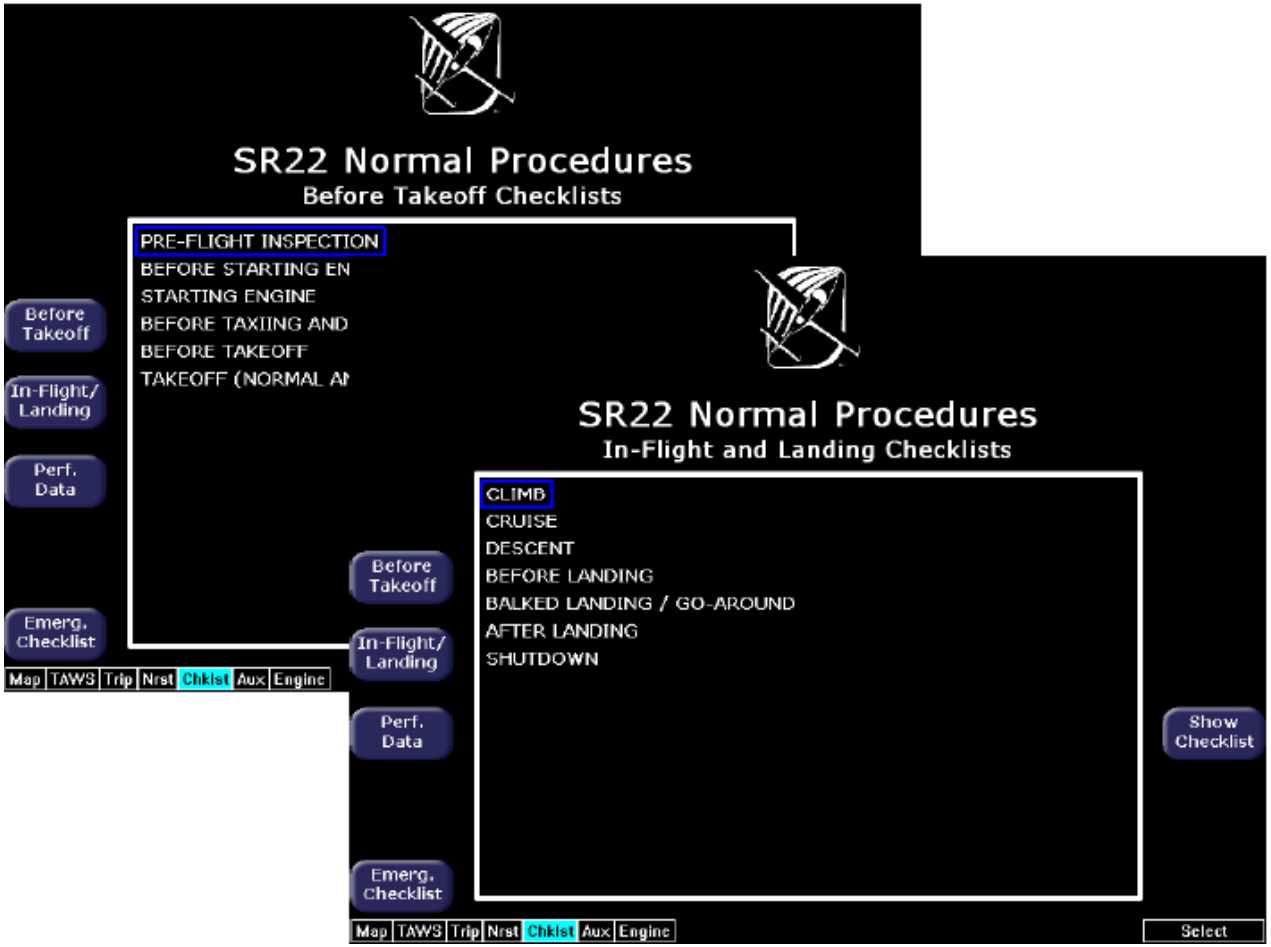


Nrst display

- Airports
- Navaids
- Waypoints
- Intersections
- Obstacles
- Split screen offers additional info

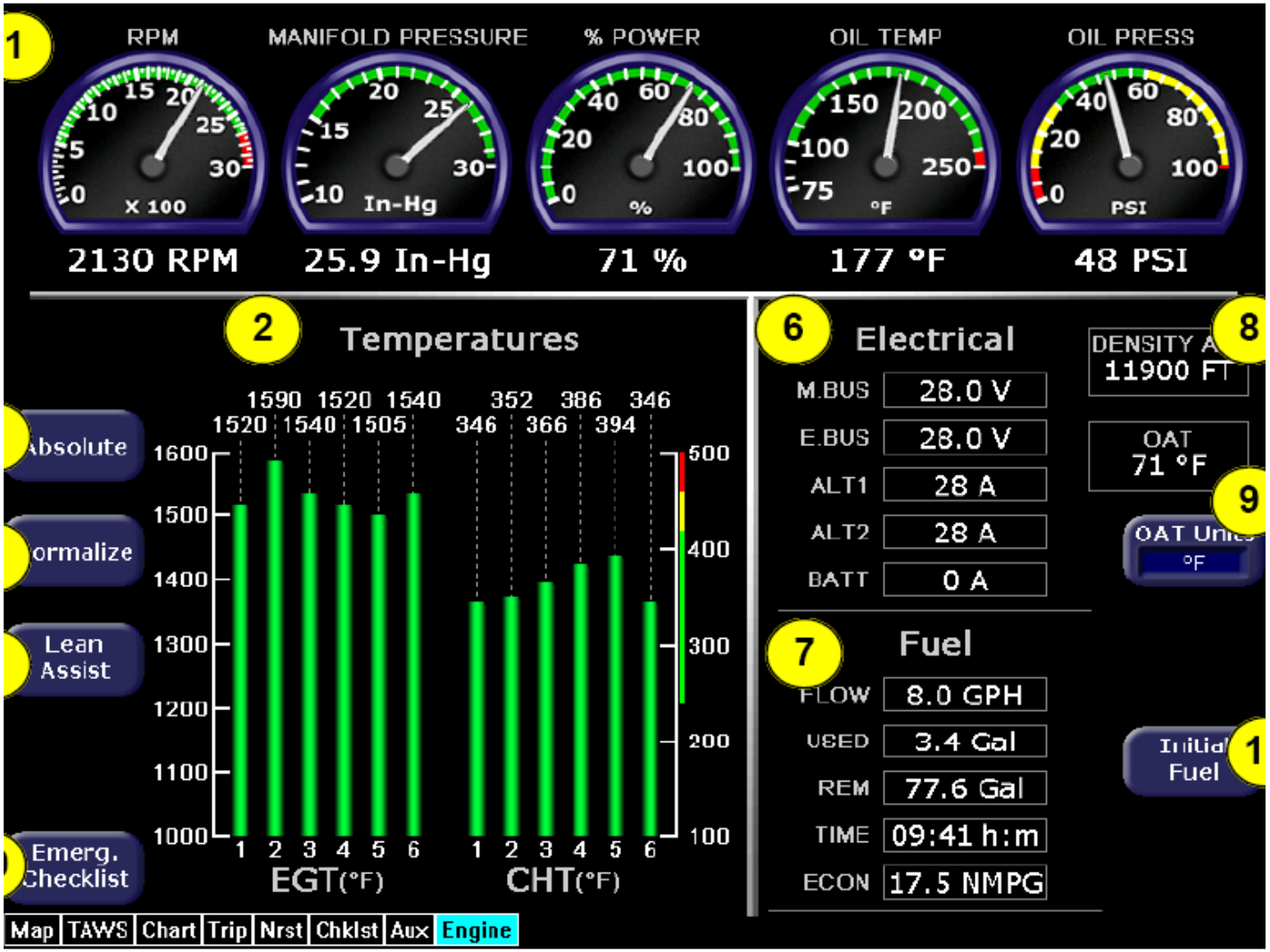
Chklst Tab

- Offers quick access to all Normal, Abnormal and Emergency checklists
- Performance Data Offers Airspeeds and Performance tables from POH



Engine page

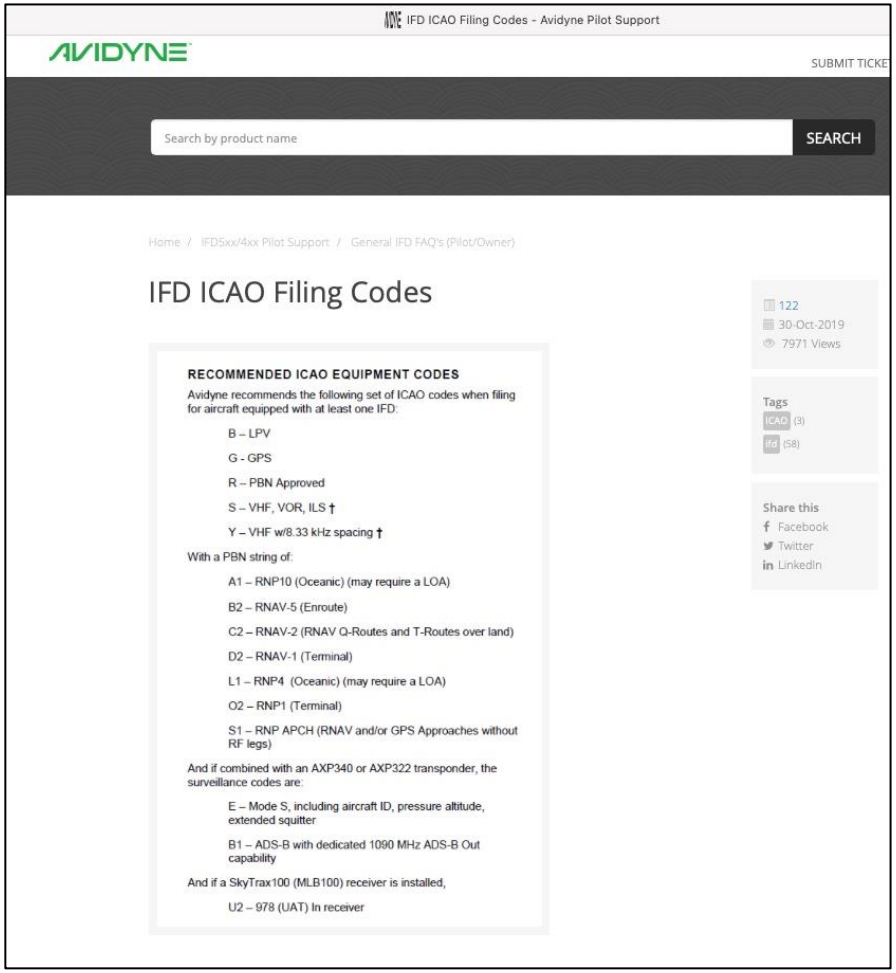
- Displays engine and systems functions.
- Assists in engine leaning and fuel planning and monitoring

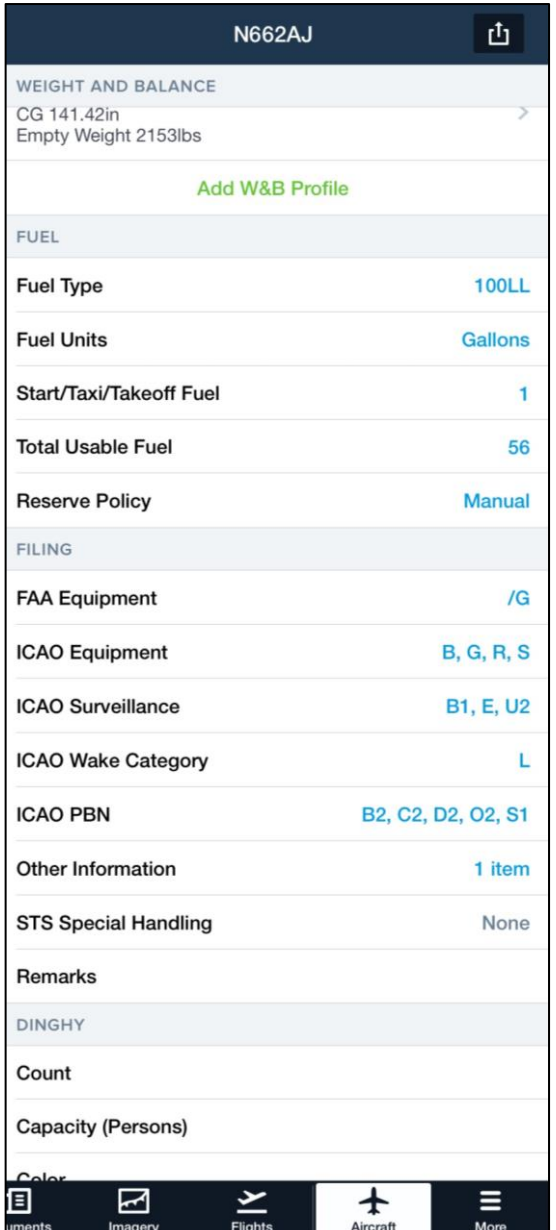


Avionics: S-tec 55X Autopilot

- **Lateral Modes:**
  - **Heading**
  - **NAV/Approach**
  - **GPSS**
- **Vertical Modes:**
  - **Altitude Hold**
  - **Vertical Speed**
  - **Glideslope Tracking**
- **Rate-Based rather than Attitude-Based Autopilot**

ICAO Filing EQUIPMENT CODES





ICAO Filing EQUIPMENT CODES

ICAO Wake Category

- (●) Light - 15,500 lbs or less
- ( ) Medium - 15,501 to 299,999 lbs
- ( ) Heavy - 300,000 lbs or more

ICAO Perf-Based Nav (PBN)

- [ ] A1 - RNAV 10 (RNP10)
- [ ] B1 - RNAV 5 All Sensors
- [x] B2 - RNAV 5 GNSS
- [ ] B3 - RNAV 5 DME/DME
- [ ] B4 - RNAV 5 VOR/DME
- [ ] B5 - RNAV 5 INS/IRS
- [ ] B6 - RNAV 5 LORAN C
- [ ] C1 - RNAV 2 All Sensors
- [x] C2 - RNAV 2 GNSS
- [ ] C3 - RNAV 2 DME/DME
- [ ] C4 - RNAV 2 DME/IRU
- [ ] D1 - RNAV 1 All Sensors
- [x] D2 - RNAV 1 GNSS
- [ ] D3 - RNAV 1 DME/DME
- [ ] D4 - RNAV 1 DME/IRU
- [ ] L1 - RNP 4
- [ ] O1 - RNP 1 All Sensors
- [x] O2 - RNP 1 GNSS
- [ ] O3 - RNP 1 DME/DME
- [ ] O4 - RNP 1 DME/IRU
- [x] S1 - RNP APCH
- [ ] S2 - RNP APCH & Baro
- [ ] T1 - RNP AR APCH & RF
- [ ] T2 - RNP AR APCH no RF

STS Special Handling

- [ ] ALTRV - Altitude Reservation
- [ ] ATFMX - ATFM exempt
- [ ] FFR - Firefighting
- [ ] FLTCK - Flight check
- [ ] HAZMAT - Hazardous material
- [ ] HEAD - Head of state
- [ ] HOSP - Medical flight
- [ ] HUM - Humanitarian
- [ ] MARSA - Military separation
- [ ] MEDEVAC - Medical evacuation
- [ ] NONRVSM - Non-RVSM in RVSM
- [ ] SAR - Search and rescue
- [ ] STATE - Military/police

Other Information

CODE	A8BBB0
COM	Optional
DAT	Optional
NAV	Optional
OPR	Optional
PER	Optional
REG	Optional
RVR	Optional
SEL	Optional
SUR	Optional
TYP	Optional

ICAO Filing EQUIPMENT CODES
OTHER Block `CODE'

N-NUMBER ENTERED: 662AJ			
AIRCRAFT DESCRIPTION			
Serial Number	1632	Status	Valid
Manufacturer Name	CIRRUS DESIGN CORP	Certificate Issue Date	12/19/2016
Model	SR20	Expiration Date	12/31/2025
Type Aircraft	Fixed Wing Single-Engine	Type Engine	Reciprocating
Pending Number Change	None	Dealer	No
Date Change Authorized	None	Mode S Code (base 8 / Oct)	52135660
MFR Year	2006	Mode S Code (Base 16 / Hex)	A8BBB0
Type Registration	Corporation	Fractional Owner	NO

ADS-B Mode S capable

Self Guided Training and Preparation

- BEFA CIRRUS SR20 Powerpoint Presentations
  - Systems PowerPoint presentations
- BEFA Website – SR20 Training Guides
- Cirrus Workbook and resources
  - IFD 440 Addendum
  - POH contains systems and procedures
  - POH Supplements
  - IFD 440 Pilot Manual
- FOM for Maneuvers and Flows
  - BEFA Checklist
  - Cirrus Checklists and MFD
- External Power Unit for Aircraft familiarization
- CIRRUS web – SR20 Training Guides

BEFA Cirrus Instructor guided Training

- Conducted by BEFA CIRRUS CFIs and Check Pilots
- Redbird with SR20 Avidyne Panel and G430s
- Review FOM for Maneuvers and Flows
  - Use of BEFA Checklist
  - Use of Cirrus Checklists and MFD
- External Power Unit for Aircraft familiarization
- IFD 440 Ground/Airborne Checkout
- Cirrus Learning Program syllabus
- BEFA Training Forms
- Cirrus FOM operation and maneuvers training
- VFR and IFR Checkout Flights

BEFA CIRRUS CFIs

NAME	STATUS
Howard Wolvington	Approved CIRRUS Check Pilot
Charles Mallory	Approved CIRRUS Check Pilot
Doug Weller	Approved CIRRUS Check Pilot
Bob Guthrie	Approved CIRRUS CFI
	Approved CIRRUS CFI
	Approved CIRRUS CFI
	Approved CIRRUS CFI
	Approved CIRRUS CFI

CIRRUS Recommended Training

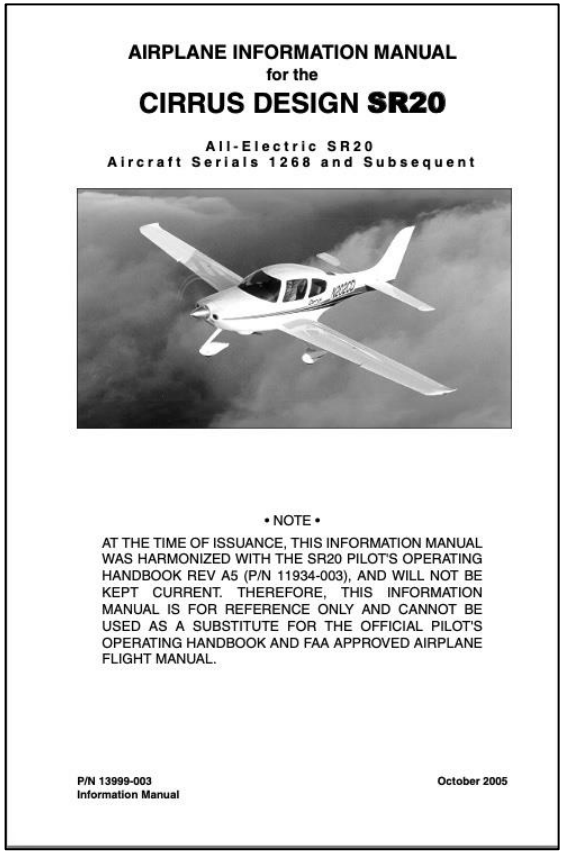
- Scenario Based Training
- Emphasis on Aeronautical Decision Making and Single Pilot Risk Management

Training Includes

- Review of Systems, Limitations, W&B, Performance
- Normal Operations with automation
- Maneuvers
- ADM: Emergency and Abnormal Procedures
- Emergency procedures with automation
- Emergency procedures without automation
- Checkride

Training time depends on VFR/IFR, experience, & preparation (IFD 440 and autopilot in particular)

Cirrus SR20 Information Manual and Workbook



AIRPLANE INFORMATION MANUAL
for the
CIRRUS DESIGN **SR20**

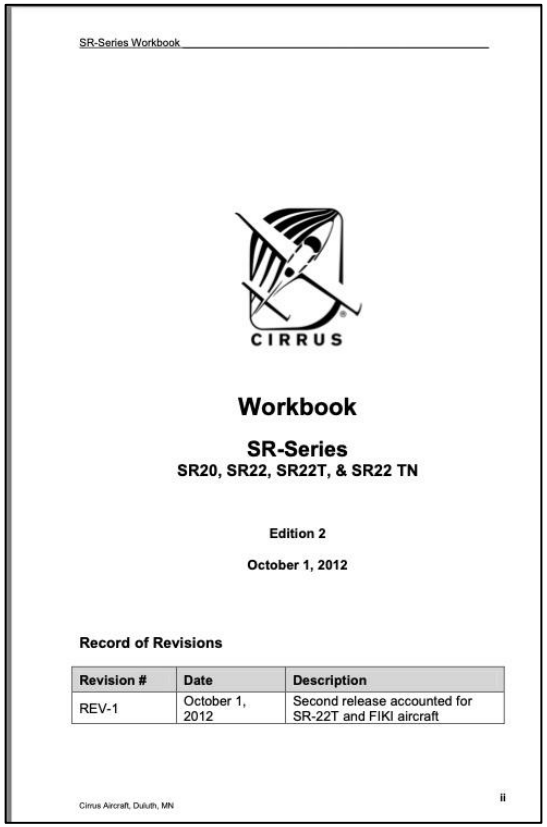
All-Electric SR20
Aircraft Serials 1268 and Subsequent

• NOTE •

AT THE TIME OF ISSUANCE, THIS INFORMATION MANUAL WAS HARMONIZED WITH THE SR20 PILOT'S OPERATING HANDBOOK REV A5 (P/N 11934-003), AND WILL NOT BE KEPT CURRENT. THEREFORE, THIS INFORMATION MANUAL IS FOR REFERENCE ONLY AND CANNOT BE USED AS A SUBSTITUTE FOR THE OFFICIAL PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL.

P/N 13999-003
Information Manual

October 2005



CIRRUS

Workbook

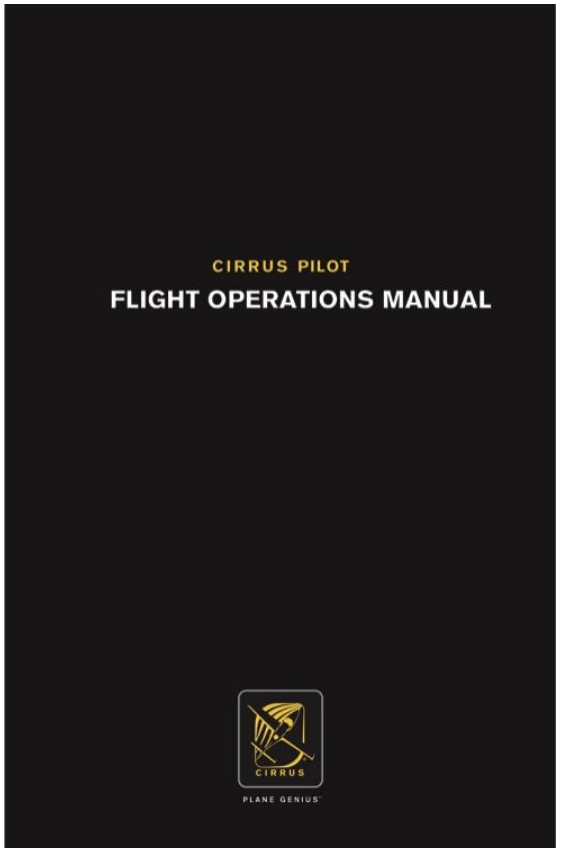
SR-Series
SR20, SR22, SR22T, & SR22 TN

Edition 2

October 1, 2012

Record of Revisions

Revision #	Date	Description
REV-1	October 1, 2012	Second release accounted for SR-22T and FIKI aircraft



CIRRUS PILOT
FLIGHT OPERATIONS MANUAL

CIRRUS
PLANE GENIUS

Cirrus Training References and Workbooks

AVIDYNE

IFD440 FMS/GPS/NAV/COM
IFD410 FMS/GPS
Pilot's Guide

QUICK REFERENCE
IFD4XX

IFD440 FMS/GPS/NAV/COM
IFD410 FMS/GPS
IFD100 App for iPad

avidyne.com | 800.AVIDYNE

AVIDYNE

Cirrus SR Series Workbook addendum SR20 N662AJ Avidyne IFD 440

These questions are an addendum to the Cirrus SR-20 workbook and intended to address only some of the most important functions of the IFD 440. The avionics changes from the Garmin 430 to the Avidyne IFD 440 are significant. All pilots are urged to become familiar with all the functions and capabilities of these units and their interface with N662AJ systems.

Ref: Avidyne IFD 440 Pilot's Guide rev. 8
https://hf-files-oregon.s3.amazonaws.com/hdpavidynesupport_kb_attachments/2022/08-31/e27f5260-1af7-4fc5-b573-95c2a1334167/600-00304-000_PILOT_GUIDE_IFD4XX_SERIES.pdf

IFD 440 QRH rev. 1
https://hf-files-oregon.s3.amazonaws.com/hdpavidynesupport_kb_attachments/2022/08-31/2c7c0b10-7586-4f6f-88ef-eeacfc5a7578/AVI22-033_IFD4XX_Guide_REV01.pdf

All Pilots

1. How would you verify the currency of the databases?

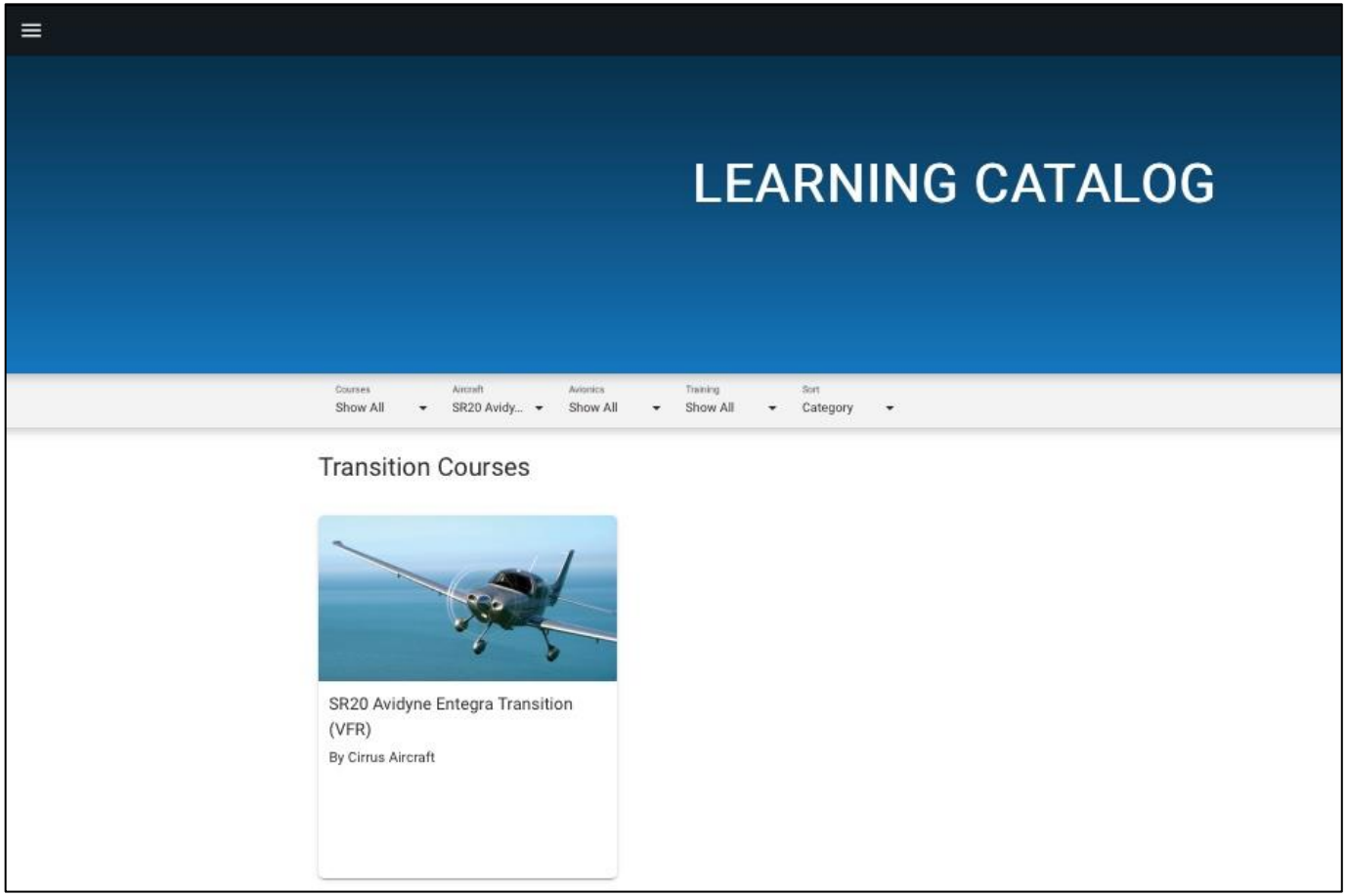
2. How to you switch to a different User after power-up?

3. Which buttons to you use to tune and swap Navigation frequencies?

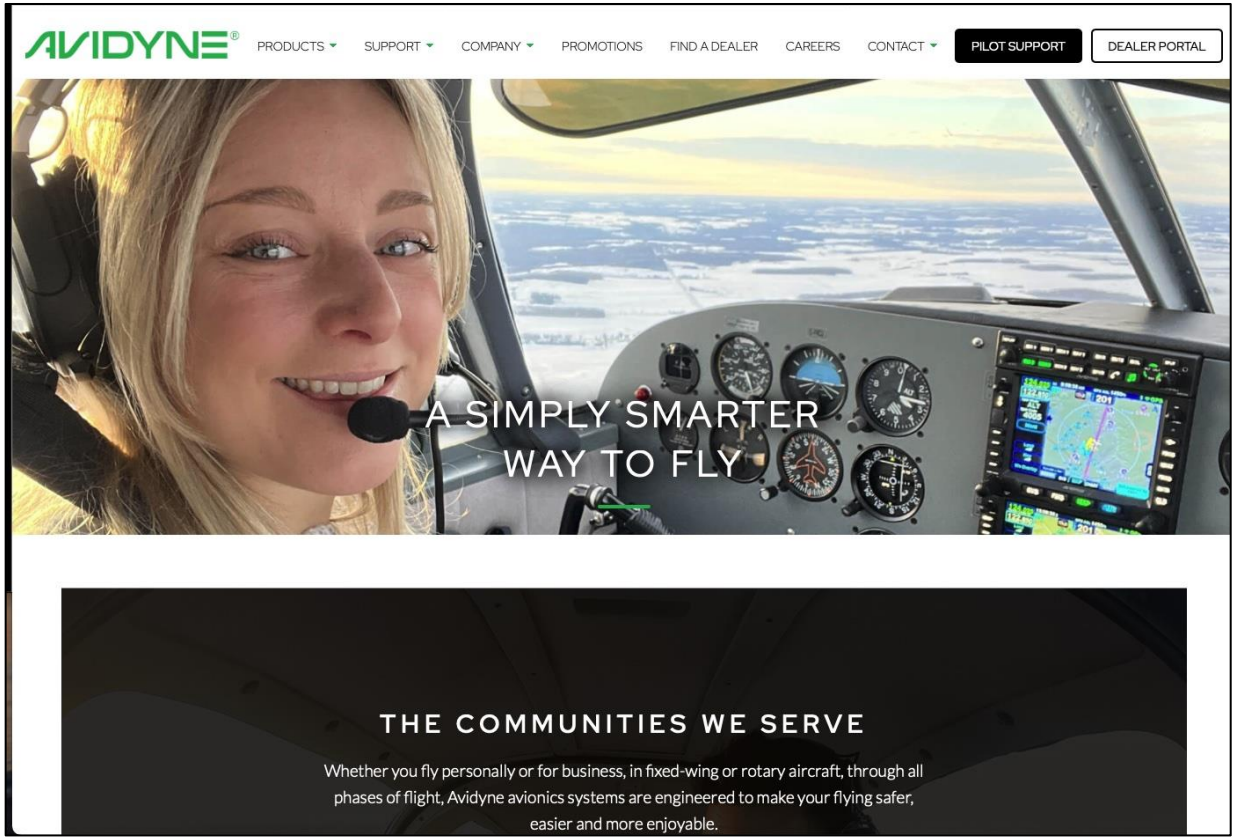
Version 2: dtd 20MAR23

Pilot Name _____

Cirrus Learning Center Resources

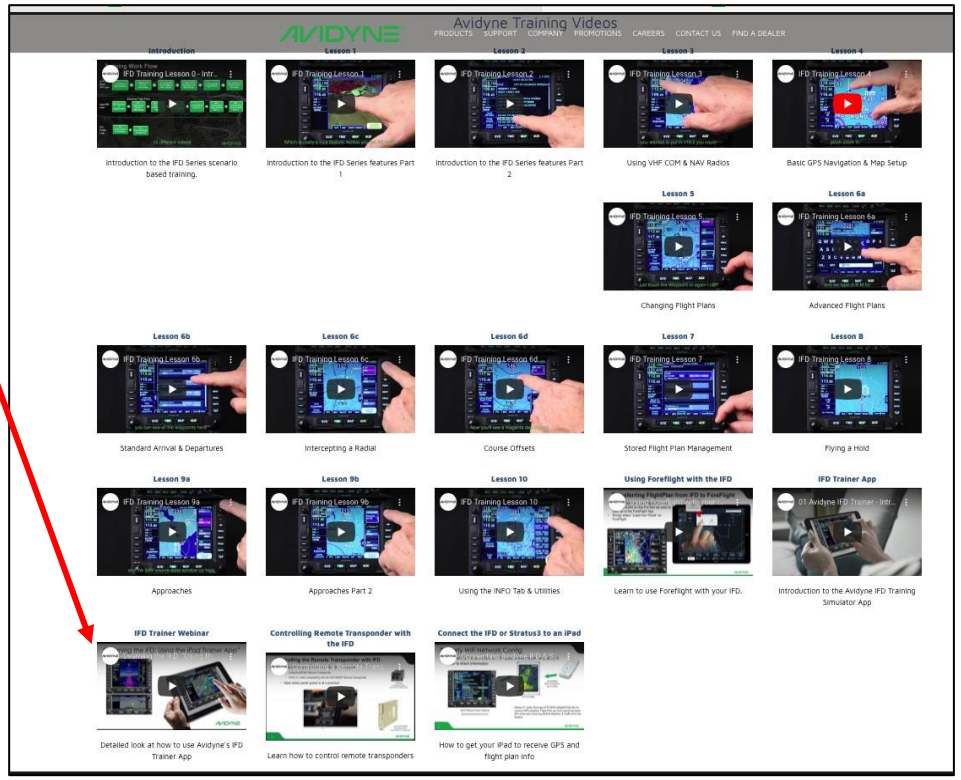


Avidyne Web Based Training and Support

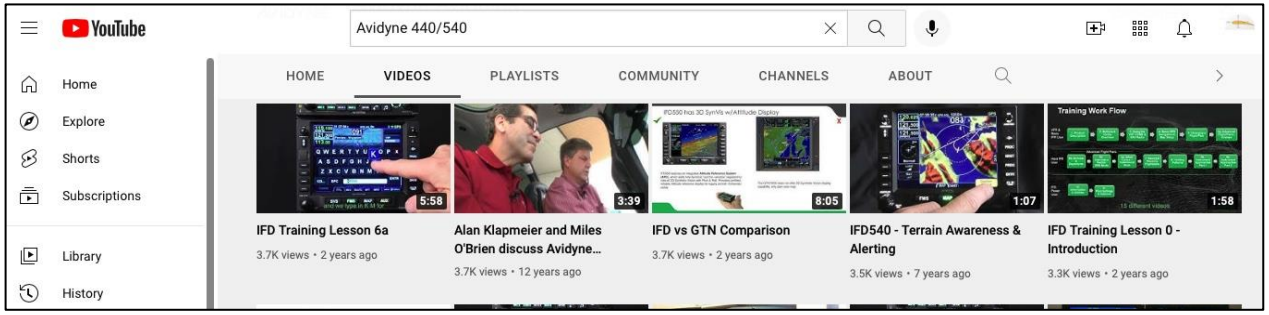


Avidyne Support IFD 440/540 Training Videos

- Avidyne requires you to register to view, which may generate some informational emails, but you'll probably access their site for other information anyway.
- The IFD Trainer Webinar is a bit lengthy (use 1.25 speed) but very informative.
- It will walk you through the setup process and all the controls and features.
- The Lessons 1 – 10 are a quick method to review the various functions. It is also accessible through the tutorials list within the IFD Trainer App.



Avidyne Training using YouTube Channel videos



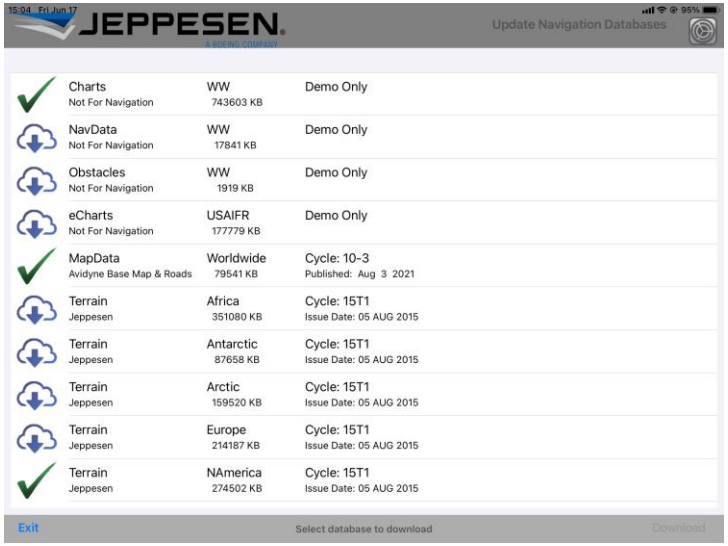
- There are several other YouTube contributors who have posted videos relating their experiences using the IFD 440/540.
- It is helpful to see the devices in action and hear the comments from actual users.

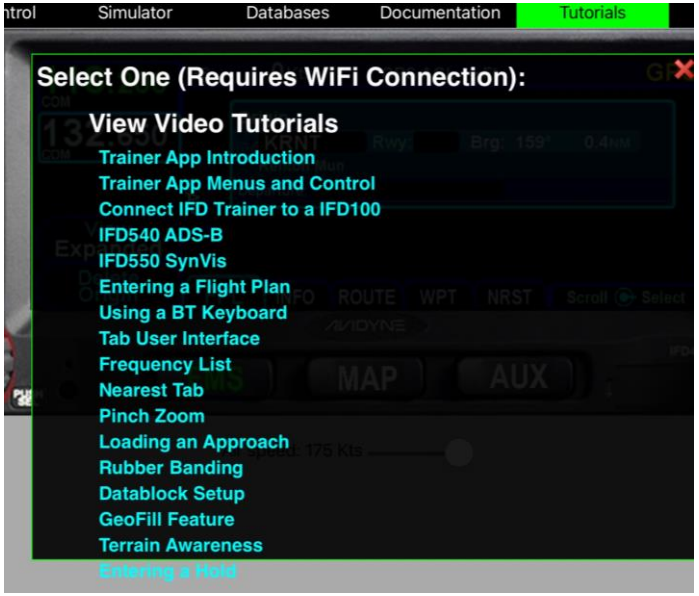
IFD Applications for iPad

- **Start with downloading the iPad App from the App store.**
- **IFD Trainer App for familiarization and practice.**

Database Selection and Tutorial List

- **Within the trainer app is a tutorial list on how to setup and run the app to allow pilots to practice using the navigator.**
- **Download the demonstration database.**



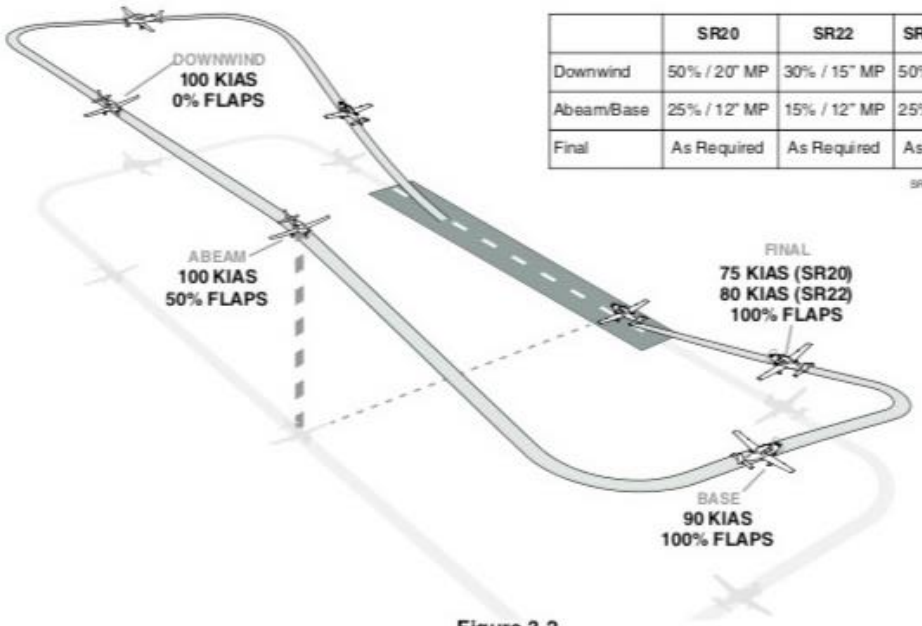


Basic IFD 440 Skills required

Completed		Task	Sub-Task
Ground	Air	VHF Comm and NAV, NAV Mode and Network Symbols	
		Tune/Swap Comm and NAV Radio	Knob/Touch Screen
		Quick Tune Frequencies and Emergency Freq	Swap button 3 sec.
		NAV Source: VLOC or GPS- OBS	Pending mode is Blue
		Adjust Selected Course	Use of PFD CRS knob
		Activate Wi-Fi, Bluetooth, Source Symbols	Green=Active
		Connect and pair iPad to IFD (AUX Setup, Devices)	Devices `Always'
		Building and Activating Flight Plans	
		FMS Pages Function Key and Map Tab	Rocker Tab displays FPL
		Enter Origin/Destination Airports	Blue
		Cyan cursor types	Insert, Edit, Field Cursors
		Add New Waypoints/Airways	
		Insert/delete waypoints	Use Insert cursor
		Creating or closing Flight Plan gaps	
		Review and Activate Flight Plan	FPL Split view or MAP Key View `Cursor' LSK to step
		FMS INFO Tab/ Edit Identifier/LSK Paste function	Autotune Frequencies
		FMS Function Key and using ROUTE List	
		Route Page management Copy, Delete, Rename RTE	
		Activate a saved Flight Plan	
		Send, Receive, Activate Flight Plan changes from EFB	
		MAP Display and MAP Page Function Key	
		Review Flight Legs on Map	Slider on FPL Tab
		Expand/Compact/Cursor Modes	Cursor to step through
		Direct-TO a wpt not in plan (Creates Gap in route)	NRST Tab use
		Scale changes and declutter Map	
		Display Datablocks Tab, MAP function split view	User profile configurable
		Changing North-Up, HDG-UP	Tap bottom right button
		SVS mode use	Use with Datablocks
		Enter a Visual Approach from the downwind leg	PROC Key functions
		Information, Utilities and User Profiles	
		Select a different the User Profile	View BEFA VFR presets
		NRST: LSK for ARPRT, VOR, FSS, ARTCC Etc.	Map split view avail +MFD

Completed		Task	Sub-Task
		INFO Tab: Freqs etc.	Get info for off-route Airport
		Alerts: Warning, Caution, Alert	ALERT: to review
		Enable/Disable Airspace Warnings	AUX FMS SETUP options
		Check the Database expiration (AUX SYS Tab) LSK	Updating Database
		UTIL: Timers and Calculator, Checklists	
		IFR Checkout	
		Building Activating and Modifying Flight Plans	
		Add SID or STAR	Select runway Select transition
		Add crossing restriction with field cursor	Field cursor white
		Create/Cancel Offset Leg	Uses current leg
		AUX SYS RAIM Predictor (Calculator function)	RAIM calculator
		Intercept a Radial TO and FROM a GPS wpt or VOR	Direct To and OBS TO/FROM
		Explain TOD point and Distance -To-Altitude Arc	Vert Spd req'd datablock
		Holding	
		Add/Modify Holding Pattern	Published holds offered
		Exit a Hold (there are 3 ways)	Direct -To a FPL wpt Exit Hold key Direct to the Hold fix
		Approaches	
		Enter an Approach, transition and runway	Review for Gaps
		Activate an Approach	Direct-To Waypoint or Activate leg
		Confirming APP mode transition	Armed Mode is →Blue
		Auto/Manual Source switching on Approach and Missed Approach	GPS-VLOC /VLOC-GPS AUX Setup feature
		Intercept DME Arc	Activate arc leg
		Procedure Turns, Hold-In-Lieu of PT	Can delete hold-in lieu
		`Enable/Activate Missed' LSK prompt Missed Approaches requiring climb to alt before turn	Auto seq is a User Opt `Sequence Leg' required
		Retry Approach function (L4 LSK)	Loads VTF transition
		Add a second approach to your Destination	Add a wpt between add'l Dest Airport wpts then (Use App Field not PROC)
		Add second destination	Add wpt after MAP hold
		Retry Approach function	Loads VTF

Questions?



	SR20	SR22	SR22 Turbo
Downwind	50% / 20" MP	30% / 15" MP	50% / 15" MP
Abeam/Base	25% / 12" MP	15% / 12" MP	25% / 12" MP
Final	As Required	As Required	As Required

SR22_OP02_2616

Figure 3-2
Traffic Pattern Profile