



# LX Navigation Colibri Training

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# Introductions

- Paul Remde
  - Cumulus Soaring, Inc.
    - Sales and support
- Uroš Krašovic
  - LX Navigation
- Ed Hollestelle
  - Solaire Canada





# Training Available

- One-on-one Training  
\$30/hour
  - Phone
  - Free internet “phone call” or video conference using:
    - Skype
    - MSN Messenger
  - Minimum system requirements:
    - PC microphone and speaker
    - High-speed internet connection



# Very Popular

- The Colibri is probably the most popular flight recorder in the world.
- Small size
- Easy to use – Just plug it in and go fly
- Perfect for Clubs and Syndicates
  - Stores data for multiple pilots and multiple gliders
- Simple Navigation Display Built-in
- USB connection to laptop – no need for 12V power supply
- Good Value
- New features every year, same price





# Training Resources

- Free "Tips" document
  - LX Navigation Colibri Setup and Tips
- This Presentation
- Both are available on the Cumulus Soaring/LX web page:  
[www.cumulus-soaring.com/lx.htm](http://www.cumulus-soaring.com/lx.htm)



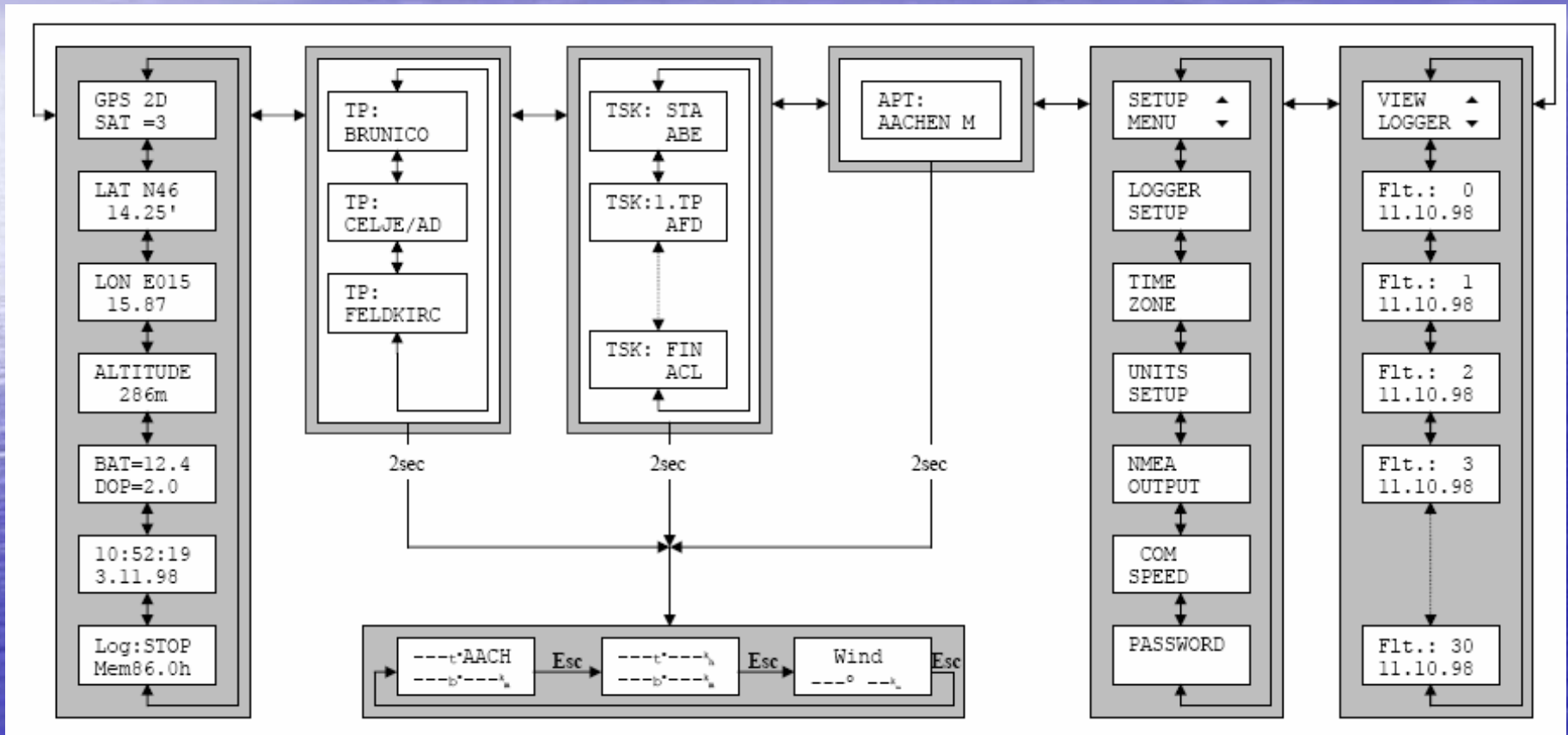
# New Features

- New in 2007
  - microSD Reader in Colibri
    - Transfer flight logs
    - Turnpoint and Task data and flight info.
    - Includes a 32 MB TransFlash card and microSD/TransFlash to SD card adapter so that the very small memory card can be read with an SD card reader.
- New in 2006
  - USB Connection for connecting to PC
  - New membrane keyboard with 2 new keys that make it easier to do task declarations and change pilot/glider data
  - Pilot and Glider Data - The Colibri can now store data for up to 100 pilots and 30 gliders. That makes it ideal for soaring club use.





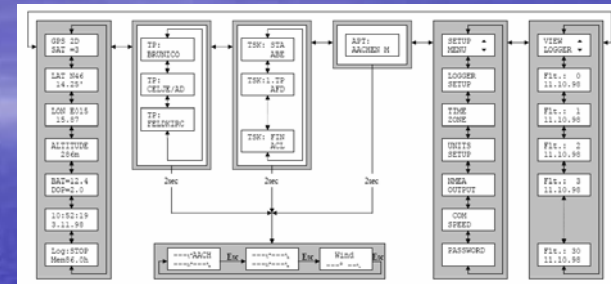
# Menu Structure and the Keyboard





# Menu Structure and the Keyboard

- Arrow keys to move through the menus
- Earlier models of the Colibri had a "✓" key for the "Enter" key and a "X" key for the "Esc" or "Escape" key.
- The "Enter" ("✓") key is used to begin editing or drill down into a menu.
- The "Esc" ("X") key is used to finish editing a number or back out of a menu.
- The "Esc" ("X") key does not usually function as a "cancel" key – backing out of editing a data field will not put the contents back to the way they were before you began editing them. I think of the "Esc" ("X") key as a "Done" key – not a "Cancel" or "Escape" key.





## Wait for "LOG:STOP"

- When done flying do not turn-off the Colibri until the Recording Status screen shows "LOG:STOP".
- The Recording Status screen is found in the GPS Status menu.
- Use the left or right arrow key to find the GPS Status menu and then use the up and down arrow keys to find the "LOG: xxxx" screen.



# Turnpoint and Airport Databases

- **Turnpoint and Airport Databases**  
The Colibri contains both "Turnpoint" and "Airport" databases. It is important to understand the difference.
- **Turnpoint Database**
  - User created list of up to 600 "turnpoints".
    - Airports
    - Gliderports
    - Off-field landing sites
    - Cities
    - Bridges
    - Mountain passes, etc.
  - Turnpoints can be used in tasks.
  - Can be edited by the user.



# Turnpoint and Airport Databases

- Airport Database
  - Up to 4500 airports provided by LX Navigation.
  - Cannot be used in tasks, but they can be copied to the turnpoint database and then used in tasks (see manual or "Colibri Setup and Tips" document).
  - Cannot be edited.



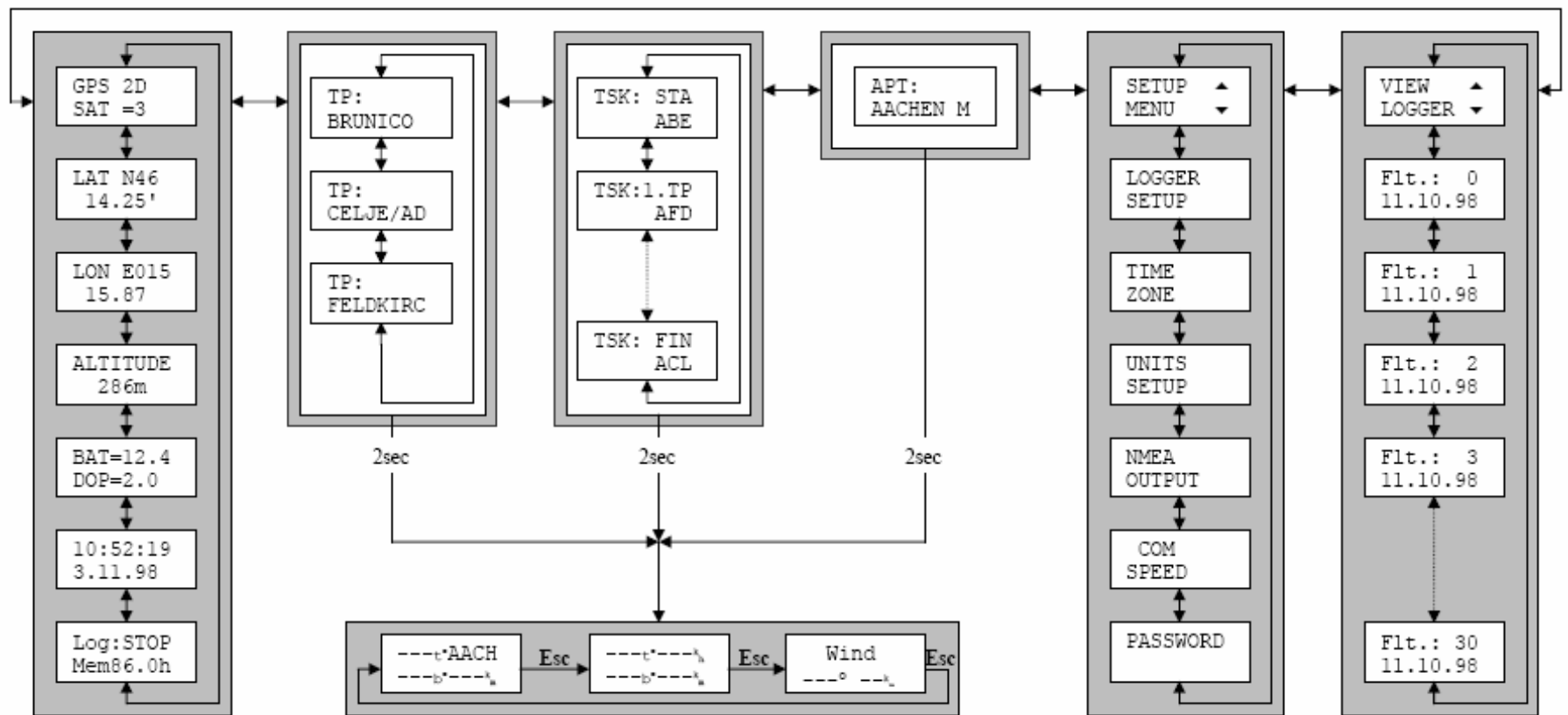
# Navigation

- It is easy to navigate to:
  - Turnpoint
  - Task Turnpoint
  - Airport
- One very nice feature of the Colibri is that you can have one Turnpoint, one Task Turnpoint and one Airport selected in the 3 different screen areas and you can easily switch between the 3 different destination types using the right and left arrow keys.



# Navigation

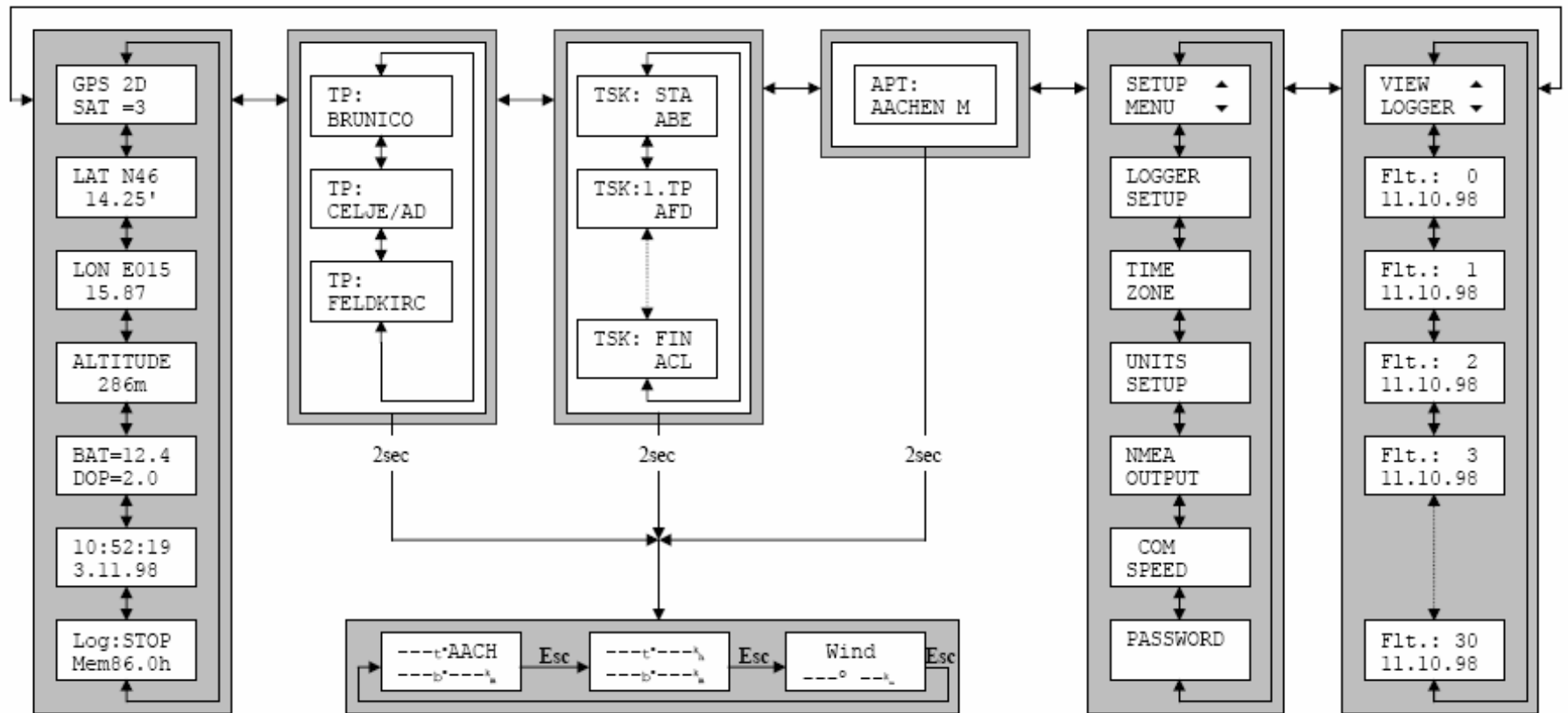
- Use left and right arrow keys to select from the TP, TSK and APT databases





# Navigation

- Press the "Esc" button to select between the 3 Navigation display windows





# Navigation

- Press the "Esc" ("X") button to select between the 3 Navigation display windows

- Navigation Screen 1

<b>Track</b>	<b>TP_Name</b>
<b>Bearing</b>	<b>Distance</b>

- Navigation Screen 2

<b>Track</b>	<b>Ground</b>	<b>Speed</b>
<b>Bearing</b>	<b>Distance</b>	

- Navigation Screen 3

<b>Wind</b>	
<b>Direction</b>	<b>Speed</b>



# Navigation

- Create Tasks in the TP Menu
  - Not in the TSK menu. The TSK menu is used to navigate to task turnpoints.
- Only one task can be active at a time.
- The active task is declared automatically when the glider takes off.
- Activate or edit tasks using the "Decl" button.
- Copy a pre-defined task to the active task by pressing the "Decl" button and selecting "DECL.TSK, COPY".



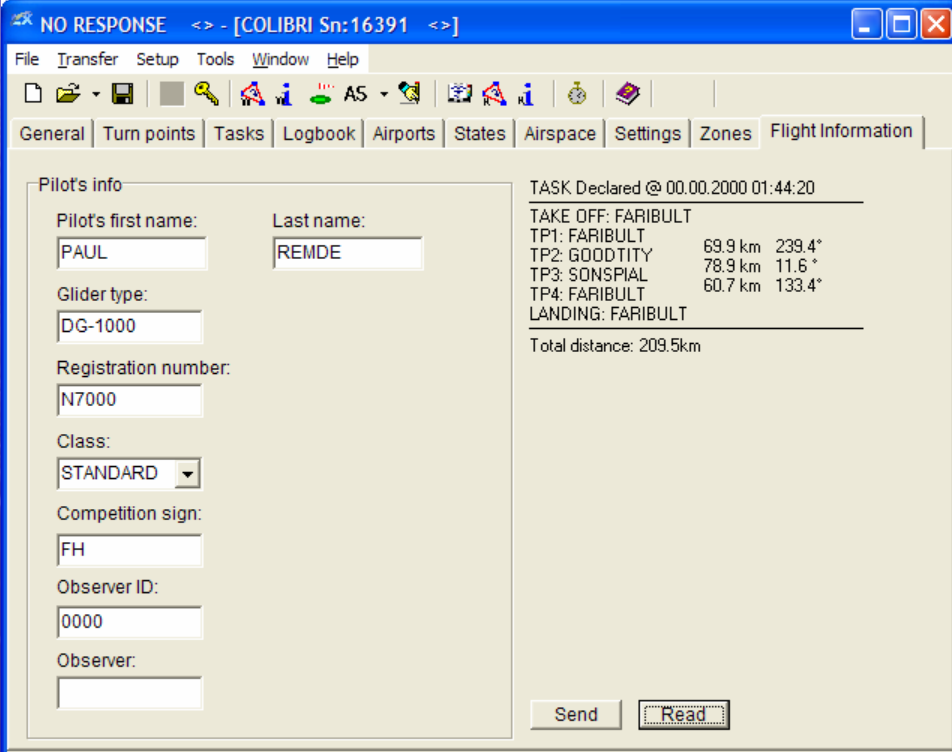
# Initial Setup with LXe

- Install LXe and Airport database
  - Available at: [www.lxnavigation.si](http://www.lxnavigation.si)
- Connect Colibri
- Direct windows to the drivers on the CD
- Run LXe



# Initial Setup with LXe

- Flight Information Tab
  - Enter Pilot Name and Glider data
  - Press "Send" button



The screenshot shows the "Flight Information" tab in the Cumulus LXe software. The window title is "NO RESPONSE <> - [COLIBRI Sn:16391 <>]". The menu bar includes "File", "Transfer", "Setup", "Tools", "Window", and "Help". The toolbar contains various icons for file operations and data management. The "Flight Information" tab is active, showing a form for entering pilot and glider data. The form fields are as follows:

Pilot's info	
Pilot's first name:	Last name:
<input type="text" value="PAUL"/>	<input type="text" value="REMDE"/>
Glider type:	
<input type="text" value="DG-1000"/>	
Registration number:	
<input type="text" value="N7000"/>	
Class:	
<input type="text" value="STANDARD"/>	
Competition sign:	
<input type="text" value="FH"/>	
Observer ID:	
<input type="text" value="0000"/>	
Observer:	
<input type="text"/>	

On the right side of the form, there is a summary of the flight information:

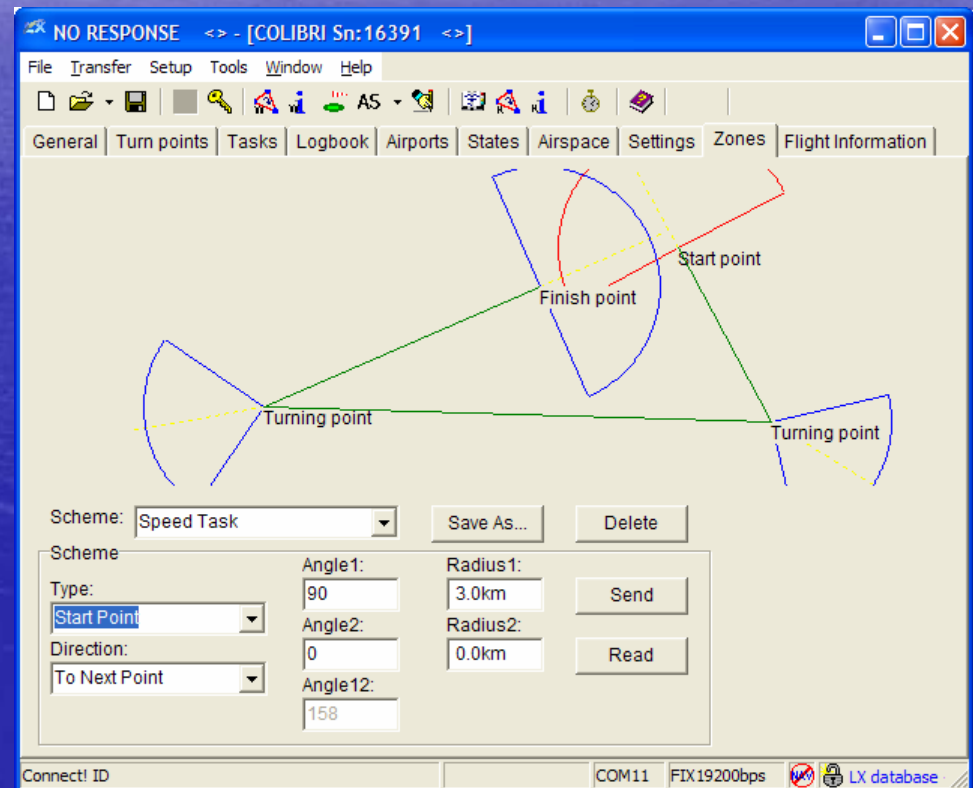
TASK Declared @ 00.00.2000 01:44:20  
TAKE OFF: FARIBULT  
TP1: FARIBULT  
TP2: GOODTITY 69.9 km 239.4°  
TP3: SONSPIAL 78.9 km 11.6°  
TP4: FARIBULT 60.7 km 133.4°  
LANDING: FARIBULT  
Total distance: 209.5km

At the bottom of the form, there are "Send" and "Read" buttons. The status bar at the bottom of the window shows "Connect! ID", "COM11", "FIX19200bps", and "LX database".



# Initial Setup with LXe

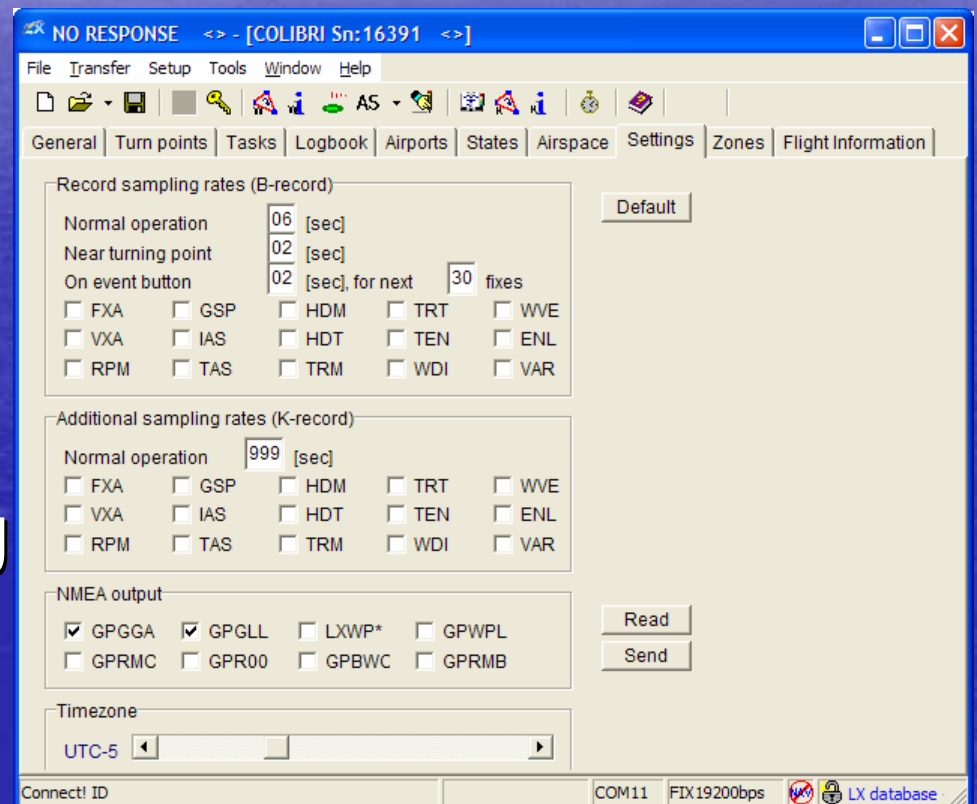
- Zones Tab
  - Select turnpoint and start and finish zones
  - Press “Send” button





# Initial Setup with LXe

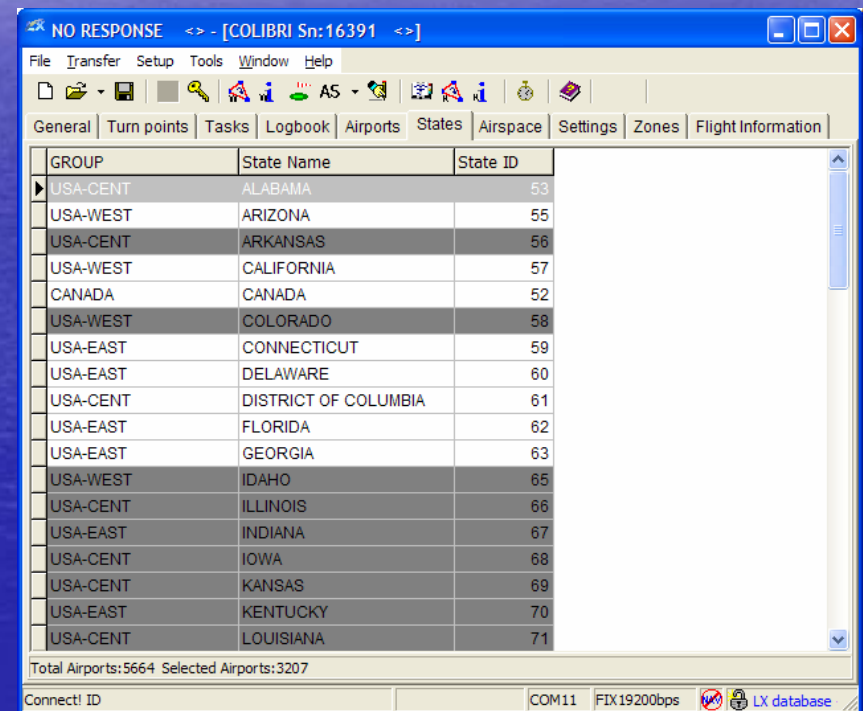
- Settings Tab
  - Set Recording Interval for Normal Operation to 6 seconds
  - Set Time zone using slider





# Initial Setup with LXe

- States Tab
  - Select states in your area by clicking on the state name
  - Press "Write Airports" toolbar button or
  - Go to Transfer menu and select "Write APT" – This can take up to 5 to 10 minutes to complete





## Transferring Turnpoints Using SeeYou or StrePla

- Download turnpoint database with all public and private airports in the USA from:  
<http://soaringweb.org/TP/FAA/files.html>
- Open in SeeYou or StrePla and select airports in your region
- Transfer directly to Colibri



# Setup Units Using Colibri Keypad

- Units are not available in LXe or SeeYou or StrePla
- Easy to adjust using Colibri Keypad



# Soaring Software Data Output Setup

- Soaring flight software requires certain data from the Colibri to work properly.
- See "LX Navigation Colibri Setup and Tips" document for step-by-step procedure



## No Task – Just Plug it in and Go Fly

- I've covered a lot of ground today.
- Please don't be intimidated
- If you don't need to use the Colibri for tasks
  - Just plug it in and go fly.
- Great for the Online Contest (OLC)
- Great as a backup logger



# Questions

- Any questions?



# Thank You

- Thank you for investing the time to learn more about the Colibri