Next Lifter Changes/Modifications

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1 Upcoming Flights

This provides a listing of the non-current flights so they may be displayed (since you can't see all the flights at once in the main window generally). Once the lifting data has been copied to the lifting sheet from the weigh-in sheet, press the "Update Flights" button in the top controls. See Figure 1.



This will populate and update the "Upcoming Flights" sheet in the workbook. Once the script completes (update flights may take a moment if you have a large number of flights) switch to

the "Upcoming Flights" sheet. It will appear similar to Figure 2. Review the sheet and adjust spacing and layout as needed. The "Name" columns may need to be expanded to fit long names.

Once the sheet looks good, open a second Excel window. You could go about this a couple of ways. You could open up a second instance of Excel (start menu->Excel), or open a new blank document in the current instance of Excel. To do this go to "File->New->Blank Workbook". This will open a new workbook. Once open un-maximize the window (press the little square button next to the "X" you press to close a window in the top right corner). You should now be able to resize and move this window around so you can see it and the window with the scoring program. Align them side by side and adjust for spacing. If opening a new Excel instance, just un-maximize the first Excel program and arrange the two instances on the screen so they're both visible and side by side. See Figure 3.

Once the second window is in place select the data in the "Upcoming Flights" sheet and copy it. Paste the data into the blank workbook using the Paste as Linked Picture special paste command. To do this right click in the first entry of the blank workbook and select "Paste Special->Linked Picture" (bottom right option). This will copy the flight data to the new window in such a way that it will update automatically if the flight order changes. Now resize/rearrange windows as needed to fit everything nicely.

If you need to update the flights due attempt/lifter changes, make the changes in the normal way, and then press the "Update Flights" button again. This will update the flight listing and side by side view (it will only autoupdate the side view if you did the special Paste as Linked Picture, if you just did a normal paste, you'll have to re-copy the data from the Upcoming Flights sheet).

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| 2 | | ETA Next F | light: | 00:00:00 | | | | | | | |
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| 4 | Flt | Name | Bench 1 | | Flt | 001100511 | Name | Bench 1 | | | |
| 5 | B | BEISEMBAYEEV, BORANBAY - KZ | 85 | | F | CHERNYS | , RICK - US HENKO, VASILY (open | 142.5 | | | |
| 7 | B | DENIKAEV, ROMAN - RU | 125 | | F | CHERNYS | HENKO, VASILY (mast | 165 | | | |
| 8 | B | LEON, BARRY - US | -137.5 | | F | MIASNIKO | /, ANDREI - RU | 170 | | | |
| 10 | B | AKENTYEV VALERIY - RU | 150 | | F | GORBACH | SKLANDREW-US | 190 | | | |
| 11 | B | TAYLOR, DAVID PAUL - US | 155 | | F | KLIMOV, VI | KTOR - RU | 195 | | | |
| 12 | В | BOUQUILLON, PASCAL - FR | 170 | | F | DIETHALM | , PETER - SW | 202.5 | | | |
| 13 | B | WALSH, MATTHEW - US | 170 | | F | OROSZ SF | R, JAN - SK | 205 | | | |
| 15 | B | SIMONSON, SCOTT - US | 200 | | F | REDKIN, P | AVEL - RU | 220 | | | |
| 16 | В | SERGEEV, IGOR - RU | 217.5 | | F | KINDZULIS | S, REINIS - LV | 225 | | | |
| 17 | B | BATSENGEL, BATAA - MG | 500 | | F | GOLUBEV | VLADIMIR - KZ | 225 | | | |
| 19 | c | ROBINSON, DARIUS - US | 170 | | F | RUTLEDG | E. JARAN - US | 232.5 | | | |
| 20 | С | VAKARCS, GEORGO - HU | 180 | | F | FABER, BO | BBY - US | 240 | | | |
| 21 | 0 | TOPLEY, GARY - GB | 180 | | G | WHEATON | , SAM - CA | 80 | | | |
| 22 | <u>c</u> | CONLEY BRANDON - US | 190 | | G | WETENHA | JL-CA | 92.5 | | | |
| 24 | č | DIDOVYK, SERGII - UA | 200 | | G | RUBTSOV | SERGEY - RU | 110 | | | |
| 25 | C | KOSHECHKIN, KONSTANTIN (oper | 210 | | G | BRILEY, G | EORGE - GB | 125 | | | |
| 26 | D | KOSHECHKIN, KONSTANTIN (mas | 210 | | G | DRUMMON | AY - RU JD: JONATHAN - US | -1/0 172.5 | | | |
| 28 | D | CALHOUN, CARL - US | 140 | | G | HOLDSWO | RTH, JL - US | 192.5 | | | |
| 29 | D | FITZPATRICK, ED - US | -145 | | G | SANOU, C | HEICK - CA | 202.5 | | | |
| 30 | | OMELKOV VLADIMIR - RU | -147.5 | | G | KOVALEVS | RIK - SK KIL ALEKSANDR - RU | 210 | | | |
| 32 | D | GRIM, KAMIL - CZ | 160 | | G | HIPPLY, SI | ETH - US | 215 | | | |
| 33 | D | MICHELON, DIDIER - FR | 170 | | G | SLUNSKY, | ALEXANDR - CZ | 220 | | | |
| 34 | D | PLATEL, ERIC - FR | 180 | | G | HERRING, | JEREMY - US | 222.5 | | | |
| 36 | D | MARTINEZ, DAVID - US | -190 | | G | HAVRDA, J | IRI - CZ | 240 | | | |
| 37 | D | GALEN, SCOTT - US | 200 | | G | MORJAL, E |)AN - US | 252.5 | | | |
| 38 | | SPIROFE DICKIE - US | 200 | | | | | | | | |
| 40 | E | MCDONALD, MATT - US | -187.5 | | | | | | | | |
| 41 | E | JOHNSTON, JEFF - US | 187.5 | | | | | | | | |
| 42 | F | BEREZIN VIACHESLAV - RU | 200 | | | | | | | | |
| 44 | E | DOWNING, ADAM - US | -212.5 | | | | | | | | |
| 45 | E | KABDESHEV, EDUARD - KZ | 220 | | | | | | | | |
| 46 | F | LIR, SERGEY (JR) - RU | 230 | | | | | | | | |
| 48 | - | | 200 | | | | | | | | |
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Figure 2: Example Upcoming Flights Sheet

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Figure 3: Example Dual Workbook Layout

2 Barload Screen

Note: This section is written assuming an engineering level of understanding of computer networking and Excel.

I modified the program to also provide a separate barload/platform screen. This makes it easier for the platform crew as it's a simpler screen which just lists the current lifter's information. See Figure 3. I know there are programs like "Barload" which do this, but the weights and names must be manually entered and they do not provide the ability to show other things such as flight and division. This method uses the scoring data directly and so automatically updates with each new lifter and allows the inclusion of other supplemental data.

To show this screen there are three possible solutions (that I currently know of and have implemented).

- 1. Possess a computer with two video outputs and place the screen on the second output to a projector.
- 2. Webserver based:
 - a. Possess a projector with WiFi/networking and serve the screen to the projector.
 - b. Provide a second laptop and serve the webpage to that laptop which it can then display as a full screen webpage.

I implement solution 2b in our meets and so that is what I will explain in detail. I have modified the scoring program to automatically save the barload sheet as a webpage each time there is a good/no lift action. This action can be configured on the setup sheet using the "BarLoad Upload" options. See Figure 4.

- Local Folder: Location to which the webpage will be saved (usually the public www folder of your webserver)
- User Name: Not used
- Folder/File Name: Name of the saved webpage file (no .htm)
- Enable/Disable: Clicking on Enable/Disable in the top right will allow you to toggle this feature on/off.
- Website: This will show the final full path of the save.

I've used WAMP as my webserver, though any server should work. I configured Apache to accept all connections with no security and give full access to all files (yes I know, but it's a direct link closed network). See attached for sample apache config.

Once configured I connect the two laptops using an Ethernet cable and configure them for static IP. I generally use 192.168.1.4 and 192.168.1.5 but any private IP pair should work. Then just open the server's IP address in a web browser on the second laptop and display the webpage.

One issue I did run into with this method is refreshing the webpage when the next lifter comes up. There are a couple solutions I've found (there is probably a better one):

- 1. Download one of the many browser addons which automatically refresh the page every x seconds. Pair this with an addon that disables/clears the cache after every load.
- 2. A friend of mine wrote a little javascript that runs and updates the page when it decides the source page has changed. I've attached it as well. You have to modify it to correctly point to your file, however you named it.



Figure 4: Barload Screen

| BarLoad Uplo | ad | | | | | | | | |
|--------------------------------------------|---------------------|-------|--|--|--|--|--|--|--|
| Local Folder | C:\wamp\www\BarLoad | | | | | | | | |
| User Name | | | | | | | | | |
| Folder/File Name | NextLifter_BarLoad | | | | | | | | |
| | | | | | | | | | |
| | We | bsite | | | | | | | |
| C:\wamp\www\BarLoad\NextLifter_BarLoad.htm | | | | | | | | | |
| | | | | | | | | | |

Figure 5: Barload Upload Configuration

3 Other Changes/Features

3.1 Weigh-in Sheet Coloring

The formatting on the weigh-in sheet was improved to automatically color the cell the in the "flight" column according to the persons weight class. This makes it easier to assign flights by weight class. It is implemented as conditional formatting using the Weight-class list from the Setup sheet.

3.2 ETA To Next Flight

On the upcoming flights sheet there is an ETA to next flight counter. This attempts to give an estimate of the time until the next flight starts. It works by keeping a running average of the duration between lifters (measured by the time interval between good/no-lift button presses), and multiplies that average by the number of lifters remaining in the flight. It also takes into account lifters who have passed (as indicated by a "o" in the attempt field) and 4th attempts. The timer resets each flight.