# Hanscom Aero Club
# Safety Meeting
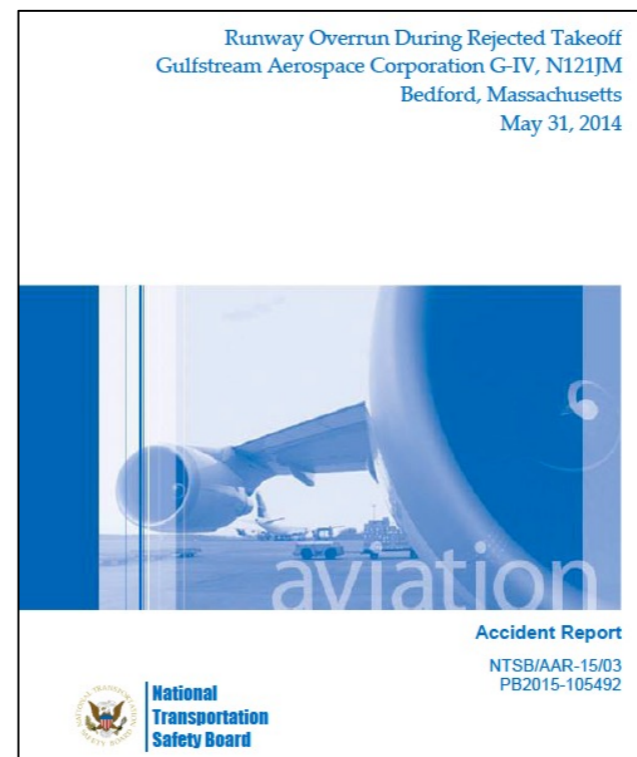
## 27 July 2022

# Outline

- **Aero Club Checklists**

- **Accidents Resulting from Failure to Use Checklists**

# Checklist Use

- **Errors of omission are some of the most common everyday forms of error, even among highly skilled experts, and have occurred in about 20% of flight crew-involved major accidents**

- **For optimum benefit, normal checklist items should be verbally called out by flight crewmembers using a challenge-verification-response format**

- **Executing checklists by memory or without standardized verbal callouts removes many of their benefits and leaves a flight crew more susceptible to error.**

Runway Overrun During Rejected Takeoff
Gulfstream Aerospace Corporation G-IV, N121JM
Bedford, Massachusetts
May 31, 2014

aviation

**Accident Report**
NTSB/AAR-15/03
PB2015-105492

National
Transportation
Safety Board

Paved Overrun

Main Wreckage

1.   NTSB AAR-15/03, "Aircraft Accident Report, Runway Overrun During Rejected Takeoff, Gulfstream Aerospace Corporation G-IV, N121JM, Bedford, Massachusetts, May 31, 2014," Section 2.2, pg 37

# N28U Accident on July 24, 2021



- On July 24, 2021, an SIAI Marchetti SM.1019B, registration N28U, was destroyed at KLWS, Lewiston, Idaho

- The pilot, Navy aviator Dale "Snort" Snodgrass, was fatally injured.

- The Marchetti was owned by 717 Aviation Inc, and was being operated as a Part 91 flight.

- The **NTSB report**, released on July 6, concluded that **Snodgrass** failed to remove his plane's flight control lock

- "Had the pilot completed a functional check of the controls before initiating takeoff, the presence of the lock would have been detected and the accident would have been prevented."

- **https://www.youtube.com/watch?v=EvODKP32Vq4**
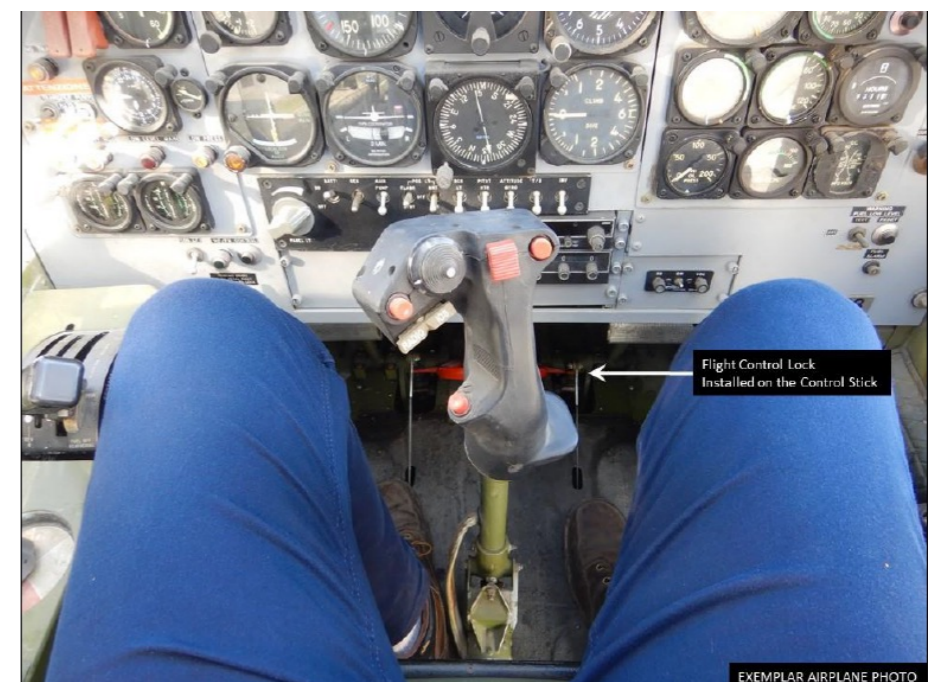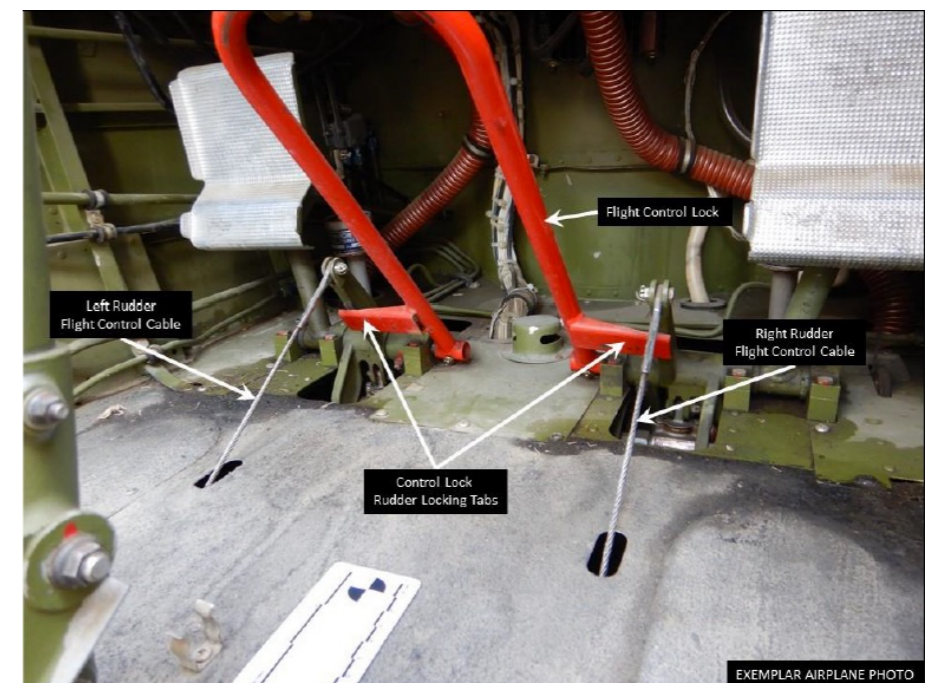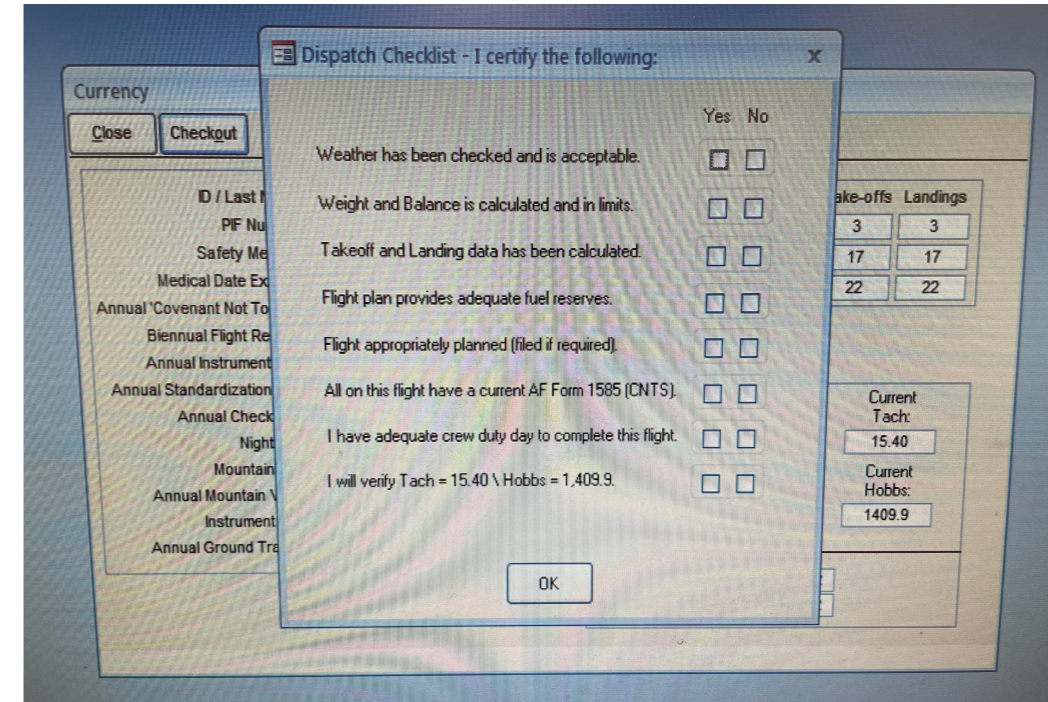
# Aero Club Checklists

- **There's a reason USAF Aero Clubs require use of checklists**

- **Several expected to be completed prior to and during flight**

  – **Preflight aids**

  – **Aircraft In-flight Operations**

- **Some you should already have memorized**

  – **Power Loss in Flight**

  – **Emergency Engine Restart**

  – **Engine Fire in Flight**

  – **Landing Checklist**

## CLEARANCE AUTHORITY'S CHECKLIST

**TYPE OF FLIGHT**   ☐ VFR   ☐ IFR   ☐ NIGHT   ☐ X/C

### PILOT QUALIFICATION / CURRENCY

| | | |
|---|---|---|
| ☐ | DISPATCH SLIP | (From Computer) |
| DS | PILOT NOT GROUNDED | (Grounded list in SOF book) |
| DS | COVENANTS CURRENT | (Member Folder, Attachments) |
| DS | CURRENT MEDICAL/ CERTIFICATES | (Member Folder) |
| DS | ANNUAL/ INITIAL CHECKOUT | (Member Folder) |
| DS | CURRENT WRITTEN EXAMS | (Member Folder) |
| DS | SAFETY MEETING ATTENDANCE/ BRIEFED | (Member Folder/ PIF Card-must attend 1/quarter) |
| DS | LATEST PIF SIGNED OFF | (Member Folder/ PIF Card) |
| DS | CURRENT FOR FLIGHT | (Logbook-IAW FAA & FTC regs) |
| ☐ | CURRENT ENDORSEMENTS | (Logbook-IAW FAA & FTC regs) |
| DS | CURRENT BFR ( Biannual Flight Review) | (Logbook-IAW FAA & FTC regs) |
| DS | PILOT NOT EXCEEDED CREW DUTY DAY LIMITATIONS | (Length of scheduled time, When did they report to work?) |

**ONLY A FTC CFI CAN CLEAR STUDENT SOLO FLIGHTS**

| | | |
|---|---|---|
| ☐ | STUDENTS - DUAL WITHIN 30 DAYS | (Member Folder/ Logbook) |
| ☐ | STUDENTS - ENDORSEMENTS | (Member Folder/ Logbook) |

### AIRCRAFT STATUS

| | | |
|---|---|---|
| ☐ | AIRCRAFT IN SERVICE | (Status Board/ AC binder) |
| ☐ | TIME SUFFICIENT BEFORE NEXT INSPECTION | (Status Board/ AC binder) |
| ☐ | DISCREPANCIES | (AC binder, 781A) |
| DS | WEIGHT AND BALANCE | (Attached if more than 2 aboard) |

### FLIGHT PLANNING

| | | |
|---|---|---|
| ☐ | FLIGHT WILL NOT INTERFERE WITH NEXT PILOT | (Check Schedule) |
| ☐ | NOTAM's and TFR's | FSS |
| DS | WEATHER BRIEFING | (FSS or DUATS) |
| ☐ | WEATHER MINIMUMS | (FTC/ FAA Regulations) |
| ☐ | PASSENGER REQUIREMENTS MET | |
| ☐ | CURRENT CHARTS/ PUBLICATIONS | |
| ☐ | FLIGHT PLAN/ PERFORMANCE CALCULATIONS | |
| ☐ | $V_{MCA}$ CALCULATION FOR BARON B55 @ ALTITUDE | |
| ☐ | AIRPORTS AND ALTERNATES SATISFACTORY | |
| DS | FUEL REMAINING UPON LANDING | (FTC regs) |
| ☐ | EQUIPMENT SUFFICIENT | (Nav/ Com, Flashlight, Survival Gear, etc.) |
| ☐ | CROSS COUNTRY OVER 72 HOURS SCHEDULED | Manager's Approval: |
| DS | FSS FLIGHT PLAN ON FILE | (FTC regs) |
| ☐ | ALL TRASH AND PERSONAL ITEMS WILL BE REOMVED AFTER EACH FLIGHT | |

### REMARKS AND ITINERARY/ FUEL STOPS

29. I certify that to the best of my knowledge the above information is true and the Pilot in Command is complying with FTC and FAA regulations.

Signature of Clearance Authority/ SOF

**Clearance Authority Checklist
(on reverse of ICAO flight plan form)**

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**ADP Dispatch Checklist**

Dispatch Checklist - I certify the following:

| | Yes | No |
|---|---|---|
| Weather has been checked and is acceptable. | ☐ | ☐ |
| Weight and Balance is calculated and in limits. | ☐ | ☐ |
| Takeoff and Landing data has been calculated. | ☐ | ☐ |
| Flight plan provides adequate fuel reserves. | ☐ | ☐ |
| Flight appropriately planned (filed if required). | ☐ | ☐ |
| All on this flight have a current AF Form 1585 (CNTS). | ☐ | ☐ |
| I have adequate crew duty day to complete this flight. | ☐ | ☐ |
| I will verify Tach = 15.40 \ Hobbs = 1,409.9. | ☐ | ☐ |

OK

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### I'M SAFE CHECKLIST

**I**llness -- Do I have any symptoms?

**M**edication -- Have I been taking prescription or over-the-counter drugs?

**S**tress -- Am I under psychological pressure from the job? Worried about financial matters, health problems, or family discord?
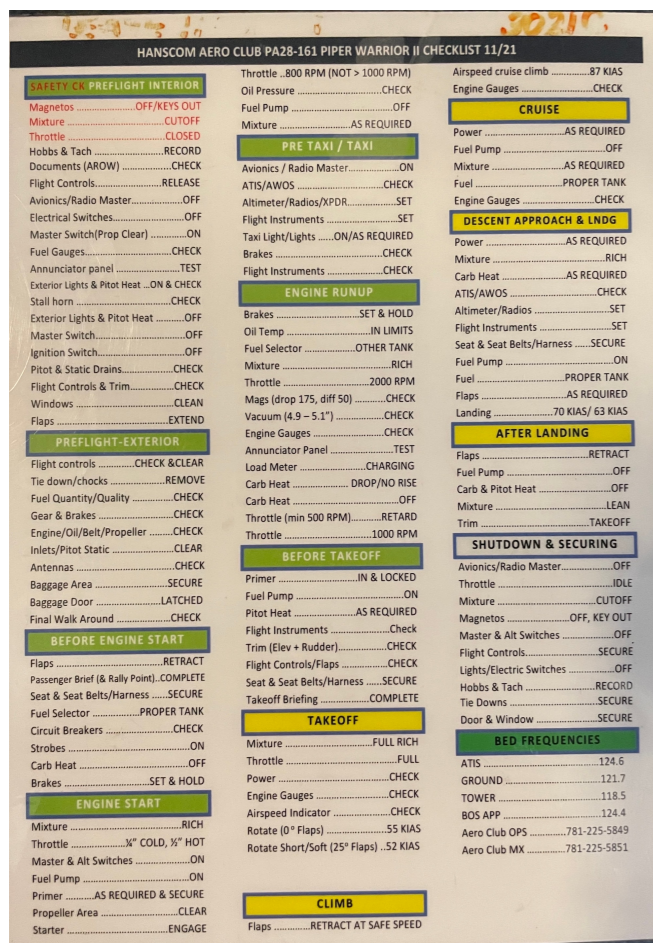
**A**lcohol -- Have I been drinking within 8 hours? Within 24 hours?

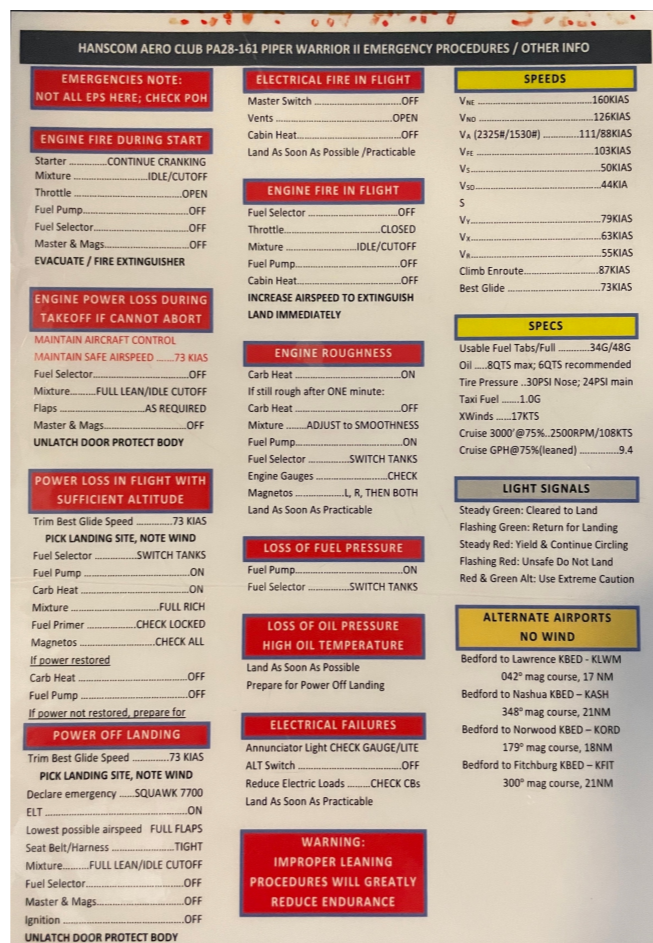**F**atigue -- Am I tired and not adequately rested?

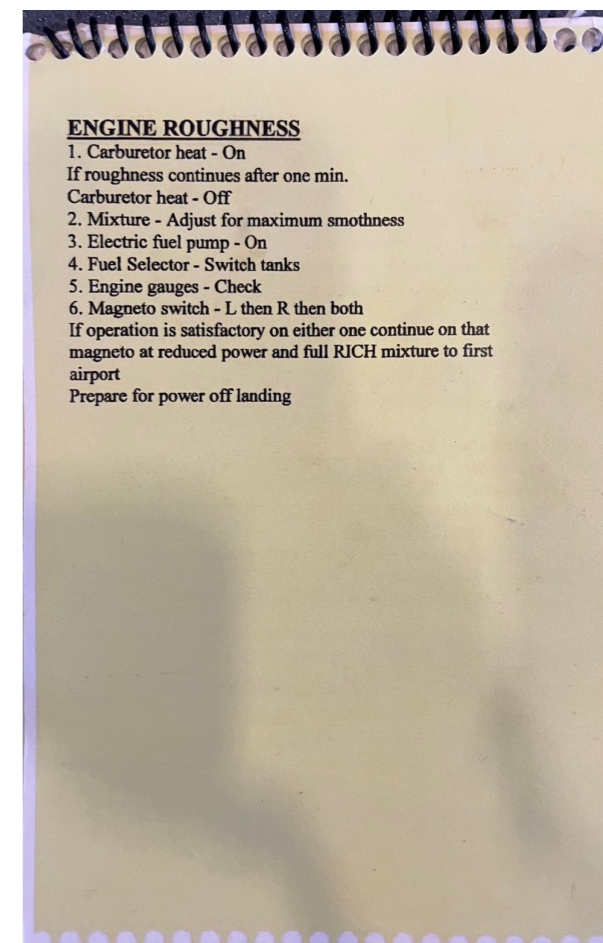**E**ating -- Am I adequately nourished?

# Checklists in the Plane



**Hanscom Aero Club "Checkmate" checklist (Warrior, normal side)**



**Hanscom Aero Club "Checkmate" checklist (Warrior, Emergency Side)**



**Hanscom Aero Club "Flipbook" checklist**



**PA-28-161 Landing Checklist Placard**

# Final Thoughts

- **Use your checklists!**

  – **Even great pilots sadly have died because they failed to do so**

  – **The steps in them are all important, don't skip them unless consciously appropriate**

    » **INOP system**

    » **no Autopilot on the Warrior**

- **Follow both the ground and in-flight checklists**

- **Memorize the critical ones you won't have time to look-up when seconds count**

  – **Power Loss in Flight**

  – **Emergency Engine Restart**

  – **Engine Fire in Flight**

  – **Landing Checklist**

- **Don't just say them in your head, verbalize the steps**

  – **Don't just say it, do it after you say it and confirm**

  – **"Gear down, 3-green, no Red, check"**