BRIDGE NIGHT VISION GOGGLE STAGE

1542.156F Updated OCT2022

- **NVG0101 (AKA NITE Lab)**
  - *Can happen before going into forms*
  - *Bring Goggles and NATOPS jacket*
  - *Take lots of notes; all day class covers every single discussion item*
- **NVG3001**
  - *Expect to brief in squadron then go to sim*
  - *Bring Goggles and helmet to brief; expect to brief how to preflight/focus goggles, course rules to Site X and maneuvers*
  - *IP will discuss/demo NVG Navigation*
- **NVG4001-3**
  - *Focus on pattern work at Site X may go to a different airfield on NVG4003*
  - *Treat NVG4002 as a systems brief*
- **NVG4101 (Green Route)**
  - *CONTACT IP Night prior. Will brief just like a TRF flight using JOG-AIR*
  - *Expect landings at Bay Minette or Atmore*
  - *Helps you understand how NVG navigation is different and see examples of checkpoints*
- **NVG4102 (AKA Build your own route)**
  - *CONTACT IP Night prior with a plan. Will brief just like a TRF flight using JOG-AIR and sectional as needed*
  - *Tests your ability to chose suitable NVG checkpoints and routing*
- **NVG4201 (AKA Capstone)**
  - *See following slides and NVG Capstone Guidance on Hellion University*

- *Overall Intent*
  - *Bring together what you have learned from NVGs and other mission areas with an emphasis on mission planning, briefing and in-flight contingencies.*
  - *Emphasize Mission Analysis and Flexibility.*
  - *Expect your Instructor to provide details about the general support mission you will be conducting to that airfield.*
  - *Prepare a route using MPS and the appropriate charts with multiple visual checkpoints*
  - *SMA/IMTs will us the shell PowerPoint brief on JMPS computers (similar to fleet style brief).*
    - *Builds smart packs, print JMPS route, and LZ diagrams*
    - *Use the Shell Powerpoint labeled: "HT-28 NVG Capstone brief 2.0 Shell.ppt" DO NOT USE EXECUTION CHECKLIST, TACADMIN SLIDES, or Routing Slides*
      - *SMA/IMTs will add CPs for their desired route and LZs. Also, update the basic "RED" information*
      - *SMA/IMTs shall contact their projected or scheduled instructor for the event the day prior*
      - *Briefs and products are located at \\c27audtwhtgp01\Student Folder on Hellion University, HT-28 Share drive Under: All Hands – STAN – NVG – NVG Capstone*

  - *Mission Brief lead by SMA/IMTs*

- **Contingency Planning**
  - **Consider the information you would need to make a quick decision in the aircraft (Fuel options, time, weight)**
- **Fuel consideration**
  - **Set Jokers and a Bingo**
  - **Conduct fuel checks**
- **Route development**
  - **JMPS; JOGAIR and section (as needed)**
  - **Use GTN and input planned route**
- **LZ/Airfield**
  - **Utilize destination diagram**
  - **SWEEP checks in flight**

- **Conduct low approach**
- **Terminal procedure to set up for landing at night**

- **System Degradations**
  - **Demonstrate Go/No-Go's**
  - **Possible Scenarios:**
    - **Weight/Fuel limitations**
    - **Prioritizing tasking**
- **Wx**
  - **Cover procedures to either circumnavigate or divert**
  - **Possible Scenario:**
    - **Bad wx on route resulting in divert to a different airfield**
- **IIMC**
  - **Indications of IIMC on goggles**
  - **Possible Scenario**
    - **Using MSA and Safe Heading**
    - **Coordinate with ATC**
    - **Pick up an approach**

- **EPs**
  - **FTI/Natops Procedures**
  - **Possible Scenario**
    - **Degradation in a non permissive environment**
- **SAR**
  - **FTI procedures**
  - **Set altitude blocks/standoff as briefed**
  - **Possible Scenario**
    - **A/C or "disaster survivor in need of help"**
    - **Cover On-scene commander checklist**
    - **Land to assist**
- **General Support/Cargo Transport**
  - **Power Calculations**
  - **Possible Scenario**
    - **Retasked to move unplanned cargo/personnel**

- *Fuel Management*
  - *Be able to calculate a bingo fuel in flight using groundspeed, distance, and fuel burn rate (27 gph)*
 - *Ex. At Bay Minette, determine fuel required to get to Jack Edwards*

- *Power Management*
  - *Determine how much weight you can pick up at an LZ based on NATOPS weight limits (3,200 lbs) and torque limits (100% for 5 mins)*
  - *Be familiar with the Torque Available and Power Required to HIGE/HOGE charts in the PCL*
  - *Ex. How much cargo can we carry from Bay Minette to Jack Edwards? Can we land and takeoff at this LZ with 3,200 lbs?*
    - *Determine how heavy the aircraft will be at the LZ (based on fuel state and operating weight)*
    - *Determine how much cargo you can take while remaining below 3,200 lbs*
    - *Use your performance charts in the PCL to determine your power required to HIGE and HOGE*
    - *Determine your power available using charts or a power check*
    - *"Based on my calculated HIGE/HOGE of 88% and 102% and max power available of 100% for 5 minutes, we have a power margin of 12% if we enter a HIGE during takeoff/landing at 3,200lbs. We are unable to enter a HOGE."*

- Airfields for landings
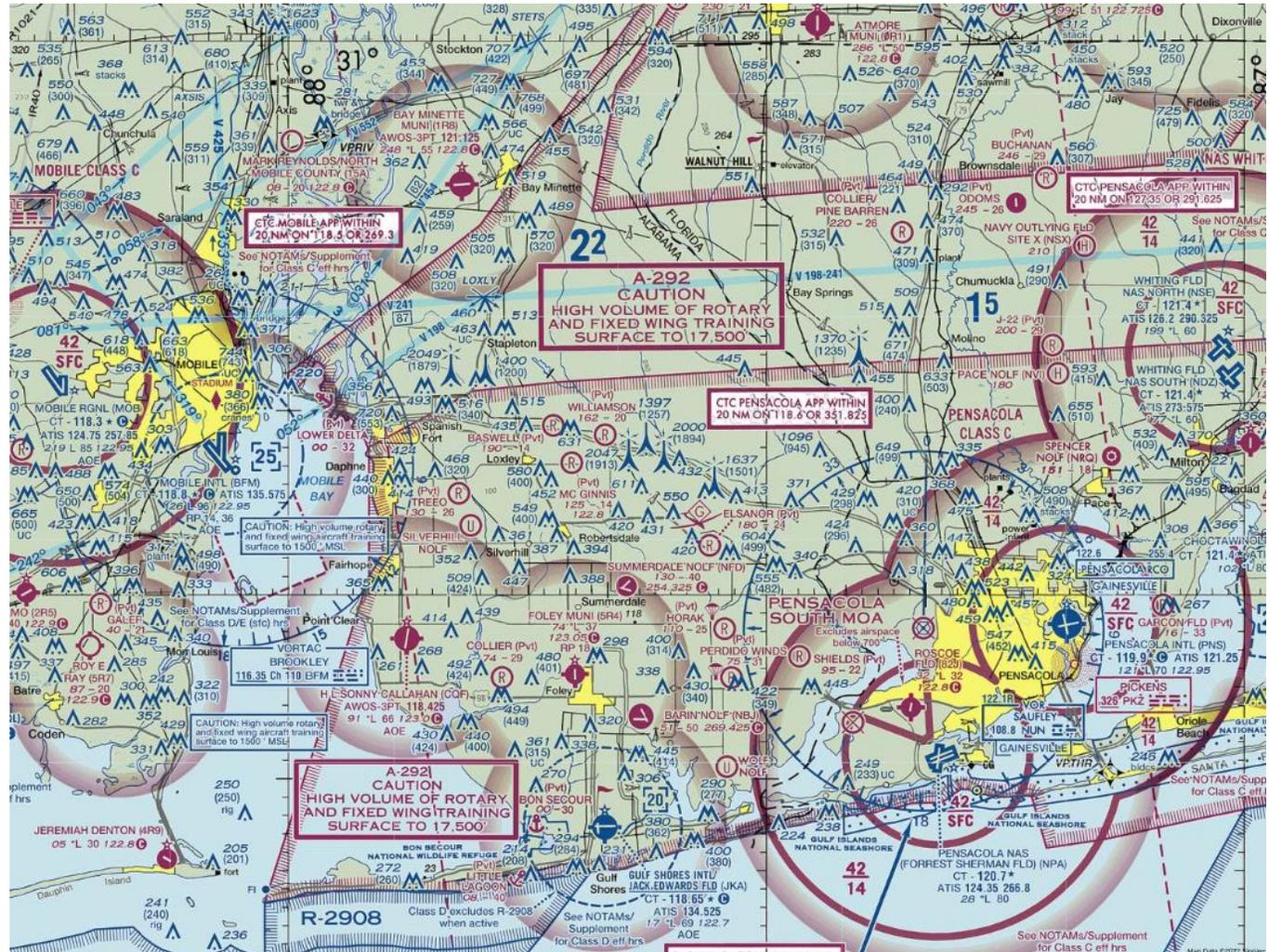 - KCEW (Bob Sikes)
  - 54J (Defuniak Springs)
  - 0J4 (Florala)
  - 79J (S Alabama Rgnl)

- En route Airspaces
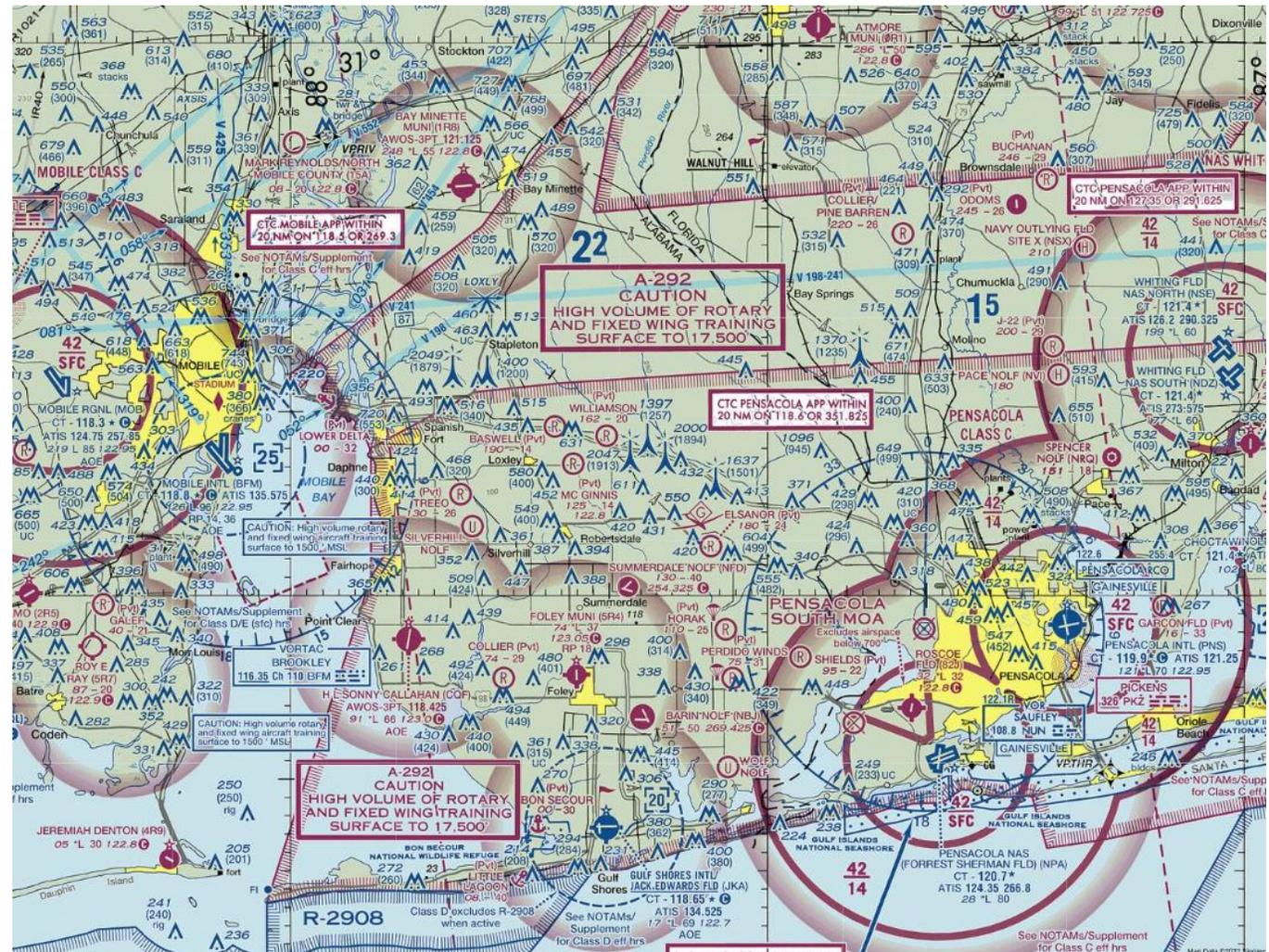 - Eglin Corridor
  - Beach Corridor
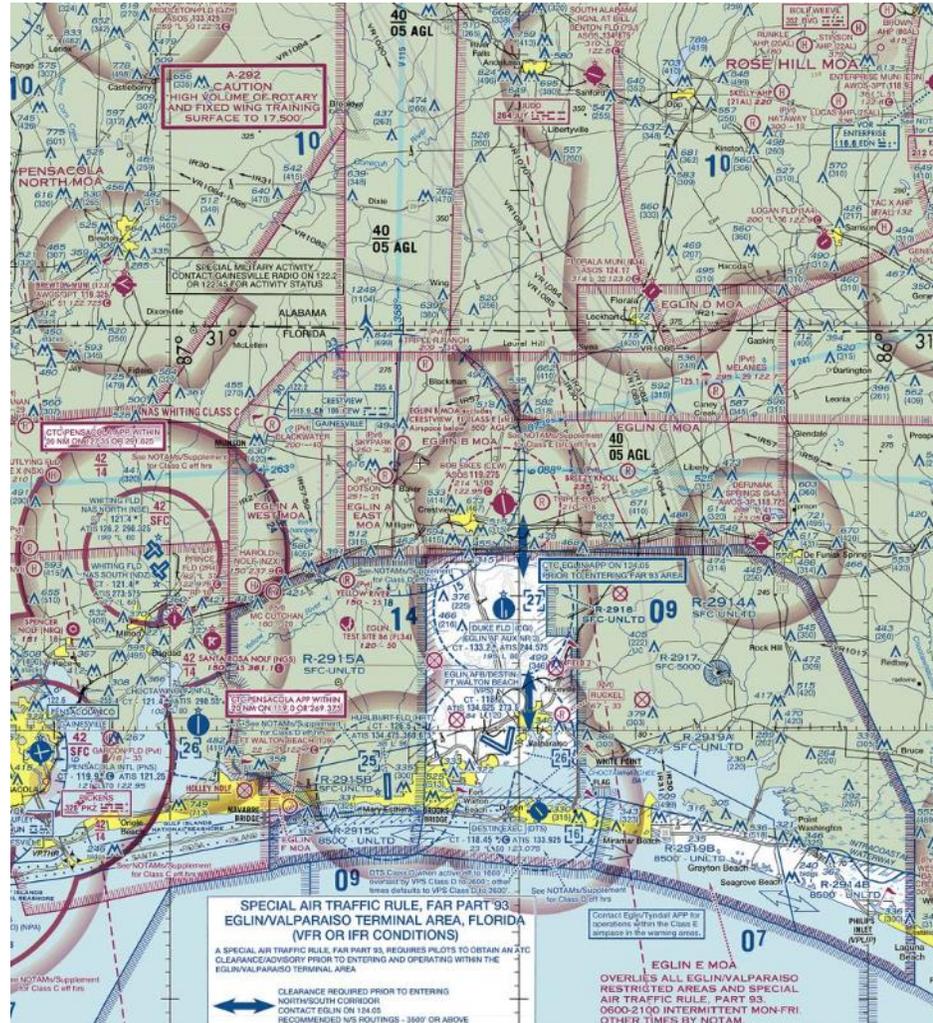
- Airfields for landing
  - KCQF (Sunny Callahan)
  - 0R1 (Atmore)
  - 1R8 (Bay Minette)

- En route Airspaces
  - Pensacola Class C
  - Green Route Deconfliction

- Airfields for landing
  - 82J (Roscoe)
  - KJKA (Jack Edwards)
  - KCQF (Sunny Callahan)

- En route Airspaces
  - Pensacola Class C
  - Restricted Areas
  - KJKA Class D
  - KNPA Class C

Send any questions to Squadron NVG Stage Leader