

# ***SNA Low Level Nav Training***

***14 October, 2014***



***LCDR Larry Spurlin – Standardization Officer  
LT McGunigle – Training Officer  
LT Scheiber – CAT I Stage Manager  
LT Goettsche / LT Carnes – CAT II Stage Leaders  
LT Weideman – CAT III Stage Leader  
Capt White – CAT IV Stage Manager***



# Agenda



- Common SNA Deficiencies
- Low Level Navigation
  - Plan (Smart Packs)
  - Brief
  - Execution
- Formation Considerations
- NVG Considerations



# Common SNA Deficiencies



- Unprofessional/Non-standardized/Incomplete Smart Packs
- Not familiar with Fuel Planning Charts in NATOPS
- Convert fuel remaining to time remaining (i.e., Time-On-Station)
- Understanding of Mission Fuel/Go-No Go Fuel/Bingo Fuel
- Missing/Inadequate/Incomplete LZ evaluations
- Understanding of Power Required vs. Power Available
- Brief Content – not tailoring it to the specifics of their event
  - The video/content in the FTI is a start, not a script!
- NVG Stage – insufficient use of NVG considerations during mission brief (Illumination/Terrain Contrast/Atmospheric Obscurations)



# Smart Packs

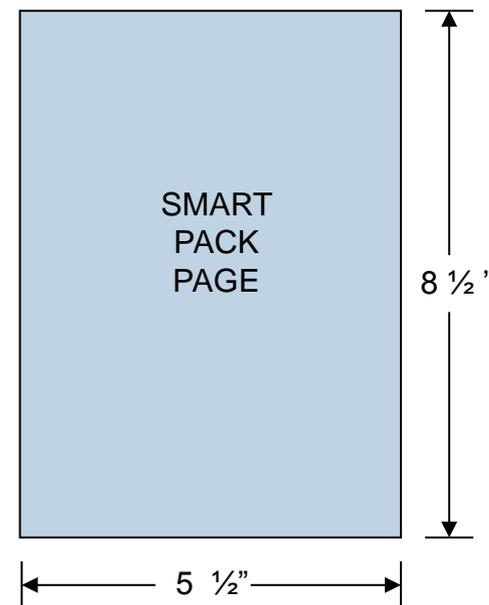


- Standardized Smart Packs

- Smart packs will include

- Cover Sheet
- Route Cards (NASWF, course rules, low level nav route, delay at OLF, course rules home)
- Bingo Route Card
- LZ Diagram (Site 8, Harold, etc)

**Kneeboard Card and Weight and Balance should not be included in Smart Pack but provided separately to the IP.**





# Smart Packs



- Loaded on JMPS computers in 'Z' Drive - "Student Share Drive" and posted on Factoryhand University
  - Use HT-18 Cover Sheet (Low Level Nav, Form, or NVG)
  - Use HT-18 Route Cards
  - LZ Diagrams
    - Site 8/Harold OLFs for Day events
    - All NVG airports for NVG events

# JMPS Computer

- My Documents
- FLORALA CASEVAC ...
- My Computer
- JmpsError...
- My Network Places
- Windows Media Player
- Recycle Bin
- Internet Explorer
- Adobe Reader XI
- ARC210 Fill Program
- JMPS 1.2.4.0550
- JMPS Manuals
- NLH MPE VDD.htm
- Roxio Creator Gold 5
- ~WRL0842....

The screenshot shows the 'My Computer' window in Windows XP. The address bar shows 'My Computer'. The left sidebar has three sections: 'System Tasks' (View system information, Add or remove programs, Change a setting), 'Other Places' (My Network Places, My Documents, Shared Documents, Control Panel), and 'Details' for 'student on 'JMPS-NAS (Jmps-nas)' (Z:) Network Drive' with File System: NTFS, Free Space: 5.24 TB, and Total Size: 5.41 TB. The main pane shows 'Files Stored on This Computer' (Shared Documents), 'Hard Disk Drives' (System (C:), Segments (D:), Data (E:)), 'Devices with Removable Storage' (3 1/2 Floppy (A:), DVD-RW Drive (F:)), and 'Network Drives' (student on 'JMPS-NAS (Jmps-nas)' (Z:)).

Click 'Z' Drive

My Documents  
FLORALA CASEVAC ...  
My Computer  
JmpsError...  
My Network Places  
Windows Media Player  
Recycle Bin  
Internet Explorer  
Adobe Reader XI  
ARC210 Fill Program  
JMPS 1.2.4.0550  
JMPS Manuals  
NLH MPE VDD.htm  
Roxio Creator Gold 5  
~WRL0842....

student on 'JMPS-NAS (Jmps-nas)' (Z:)

File Edit View Favorites Tools Help

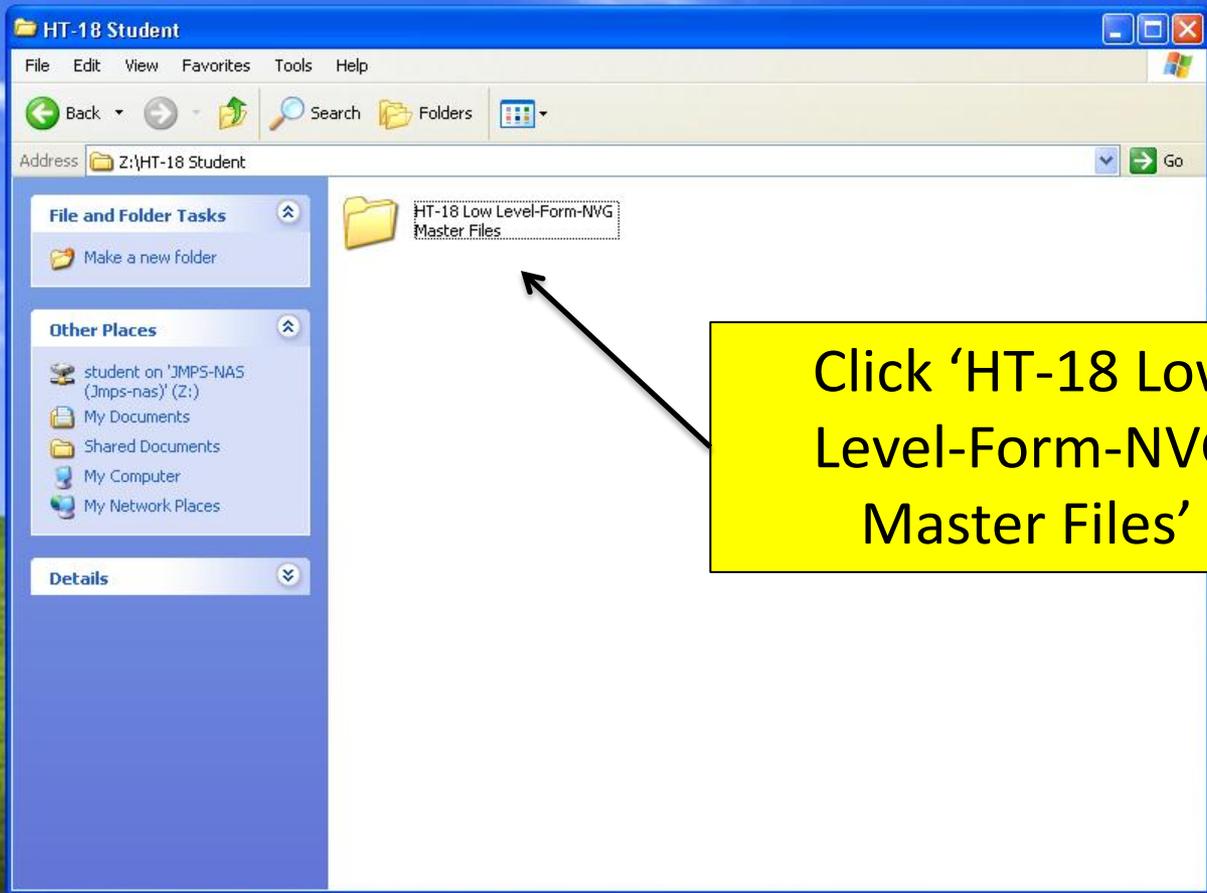
Back Search Folders

Address Z:\

Name	Type	Modified
Hopper	File Folder	11/13/2013 7:33 PM
HORN1	File Folder	8/14/2013 4:19 PM
Howard	File Folder	10/29/2013 12:29 PM
Hoyt	File Folder	2/7/2014 12:17 PM
<b>HT-18 Student</b>	File Folder	11/15/2013 8:10 PM
Huber	File Folder	2/4/2014 10:23 AM
HUFF	File Folder	12/18/2013 7:56 AM
Hughes	File Folder	7/28/2013 5:24 PM
Hylander	File Folder	10/11/2013 10:36 AM
IACOPINO	File Folder	8/7/2013 3:20 PM
Ibarra	File Folder	1/23/2014 12:12 AM
ISBELL	File Folder	10/11/2013 10:36 AM
JESTER	File Folder	5/30/2013 3:54 PM
JHemler	File Folder	9/26/2013 3:38 PM
Johns	File Folder	7/12/2013 5:16 PM
JOHNSON	File Folder	8/14/2013 8:23 PM
Johnson, M	File Folder	10/16/2013 6:56 PM
Johnson,D	File Folder	1/14/2014 8:27 AM
JONES	File Folder	8/8/2013 5:10 PM
Jones, W	File Folder	12/20/2013 11:18 AM
Joses	File Folder	2/4/2014 7:36 PM
Jungle Curry	File Folder	6/2/2013 9:05 PM
KEEF	File Folder	6/9/2013 3:15 PM
KEHOE	File Folder	12/20/2013 11:17 AM
KELLAM	File Folder	10/11/2013 5:00 PM
KEMPER	File Folder	1/26/2014 1:43 PM
kennedy	File Folder	

Click 'HT-18 Student'

Size: 2.58 MB  
Folders: HT-18 Low Level-Form-NVG Master Files



Click 'HT-18 Low Level-Form-NVG Master Files'



HT-18 Low Level-Form-NVG Master Files

File Edit View Favorites Tools Help

Back Search Folders

Address Z:\HT-18 Student\HT-18 Low Level-Form-NVG Master Files

**File and Folder Tasks**

- Make a new folder

**Other Places**

- HT-18 Student
- My Documents
- Shared Documents
- My Computer
- My Network Places

**Details**

Cover Pages

Low Level Nav LZ Diagrams

NVG Low Level LZ Diagrams

Click on Cover Sheets or LZ Diagrams



# Smart Packs



- Cover sheets for Low Level Nav, Form, and NVG are in **Cover Sheets** folder.
- Site 8 and Harold LZ Diagrams are in **Low Level Nav LZ Diagram**.
- NVG Landing Sites (Atmore, Bay Minette, Defuniak Springs, Florala, Foley, Sonny Callahan) are in **NVG Low Level LZ Diagrams** folder.



# Example Cover Sheet



**FACTORYHAND** \_\_\_\_\_

A/C		SPOT		INSTRUCTOR		STUDENT	
BUNRISE	BUNSET	MOONRISE	MOONSET	EENT	% ILLUM		
MISSION FUEL	GOING-GO FUEL	GOING FUEL	WIND CURRENT		WIND FORECAST		

UHF			VHF		
PRESET	AGENCY	FREQ	AGENCY	FREQ	
1	KNDZ ATIS	273.57	IP CMN / EGLIN TRAFFIC IN THE EAST	121.95	
3	S. WHITING GROUND	348.8	S. WHITING TOWER	121.4	
4	S. WHITING TOWER	348.87	PENSACOLA APPROACH (NDZ)	124.85	
8	HT-18 SCHEDS	255.1	PENSACOLA APPROACH (EAST)	119.0	
12	NOLF HAROLD	237.9	PENSACOLA APPROACH (WEST)	118.8	
13	NOLF SITE 8	251.3	EGLIN APPROACH	124.05	
14	GREEN ROUTE CMN	384.3	LAKES MONITOR	135.15	
15	ORANGE ROUTE CMN	282.7	BOB SIKES ASOS	119.275	
18	PURPLE ROUTE CMN	377.1	BOB SIKES CTAF	122.95	
19	WESTERN TRAINING AREA CMN	311.4	FLORALA CTAF	123.0	
***MODIFY THESE AS APPROPRIATE FOR YOUR FLIGHT***			***MODIFY THESE AS APPROPRIATE FOR YOUR FLIGHT***		

NAVAIDS			
NAV 1		NAV 2	
STATION	IDENTIFIER / ID	FREQ / CHANNEL	WAYPOINT
WHITING	NSE / -	112.3 / 70X	EXAMPLE
CRESTVIEW	CEW / -	115.9 / 106X	KNDZ
SANTA ROSA	NGS / -	83X	GREEN CP'S 1-10
GATESWOOD	NBJ / -	80X	KNDZ
PICKENS	PKZ / -	328	

UHF COMM FLOW				
OUTBOUND: BT 9,1,3,4	ENROUTE: BT 9,19	ROUTE: BT 14	OLF OPS: BT 13	INBOUND: BT 8,1,4,3
SQUAWK				
OUTBOUND: 0100	WEST: 4777	EAST: 4877	OLF OPS: 1200	INBOUND: 0400

**NOTES:**

Enter flight information

Modify frequency and navaid information to fit your flight

Modify comm flow for your flight

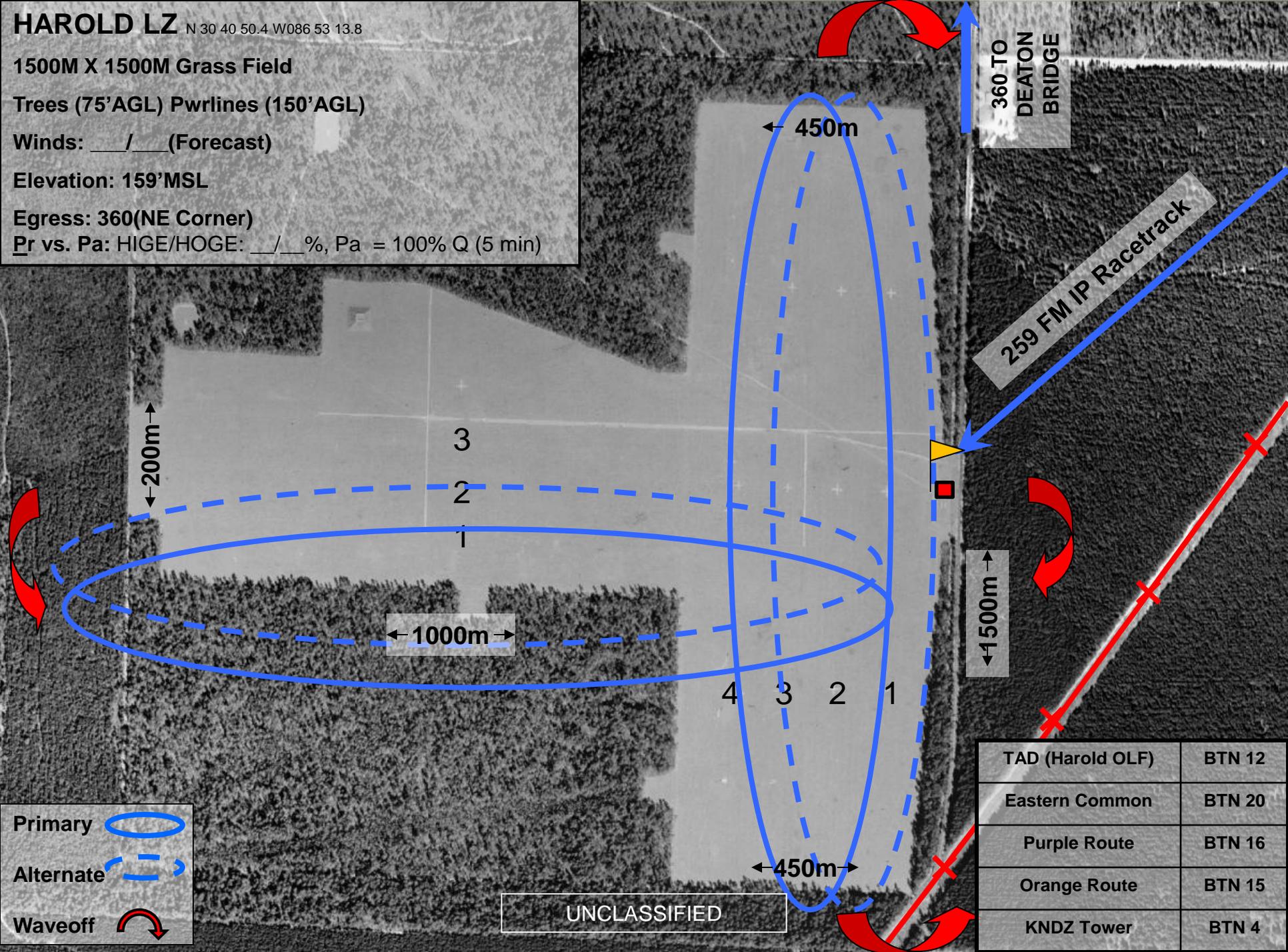


# Example LZ Diagram - Harold



- See Next Slide:
  - Fill in Winds and HIGE/HOGE as expected / calculated.
  - Adjust solid / dashed blue ovals for desired primary and alternate patterns based on desired landing point.
  - Adjust Waveoff arrows (red arrows) as necessary

**HAROLD LZ** N 30 40 50.4 W086 53 13.8  
 1500M X 1500M Grass Field  
 Trees (75'AGL) Pwrlines (150'AGL)  
 Winds: \_\_\_/\_\_\_(Forecast)  
 Elevation: 159'MSL  
 Egress: 360(NE Corner)  
 Pr vs. Pa: HIGE/HOGE: \_\_\_/\_\_\_%, Pa = 100% Q (5 min)



**Primary** 

**Alternate** 

**Waveoff** 

TAD (Harold OLF)	BTN 12
Eastern Common	BTN 20
Purple Route	BTN 16
Orange Route	BTN 15
KNDZ Tower	BTN 4

UNCLASSIFIED



# Smart Packs



- Route Cards
  - Follow instructions to build route cards per JMPS Class.
  - Adjust Fuel Burn **per NATOPS** for airspeed on each leg
    - Course Rules – 100 KIAS
    - Route – 90 KIAS
    - TLAs – 80 KIAS
    - Bingo – Max Range Airspeed
  - JMPS default set to 28 gph for all airspeeds – **this is NOT accurate!**

**Don't forget to adjust fuel load for RWOP OLF Fuel Minimums  
(Site 8 – 25 gal, Harold – 20 gal).**

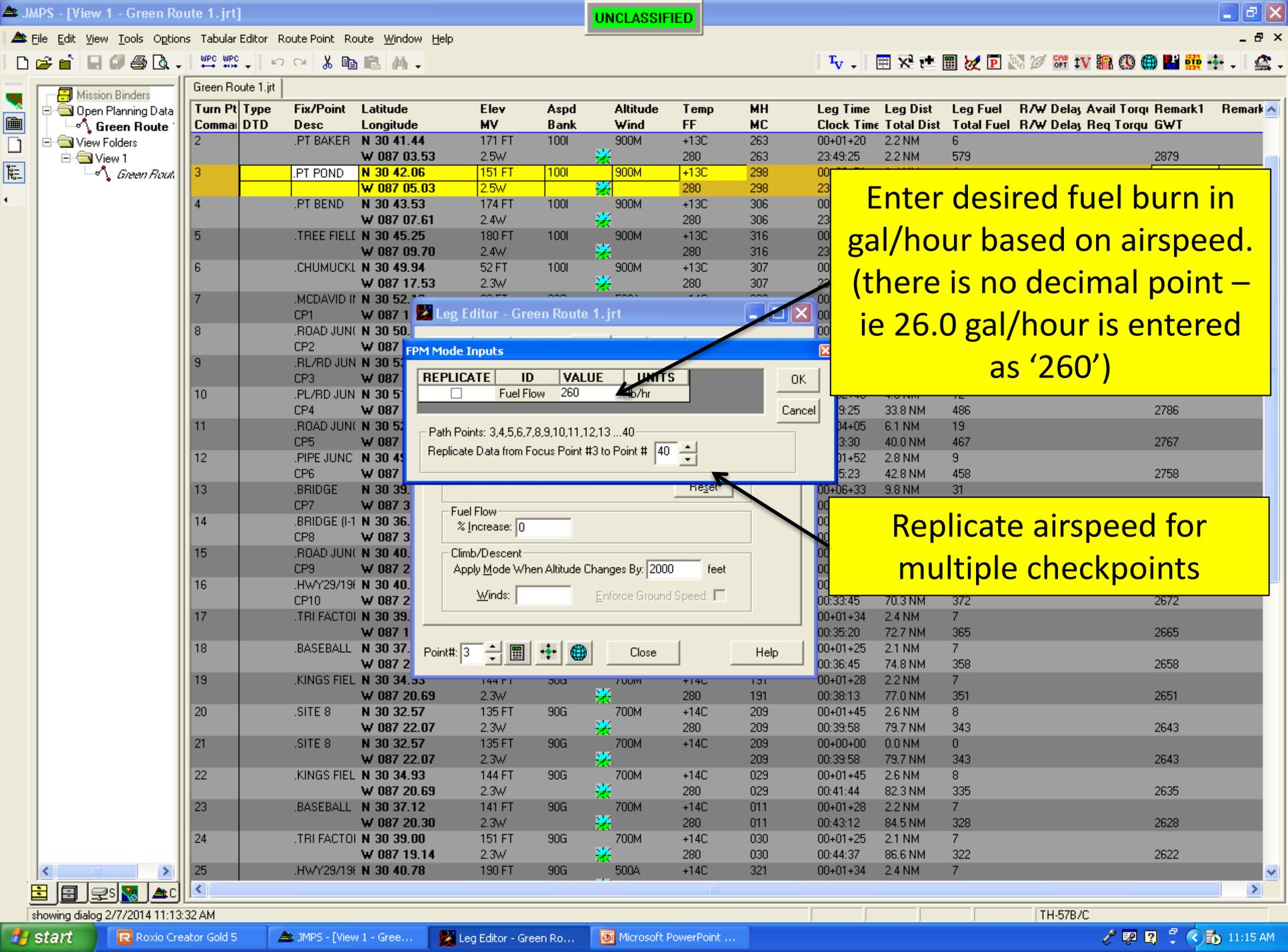
Turn Pt	Type	Elev	Aspd	Altitude	Temp	MH	Leg Time	Leg Dist	Leg Fuel	R/W Delay	Avail Torq	Remark1	Remark
Comma1	DTD	MV	Bank	Wind	FF	MC	Clock Time	Total Dist	Total Fuel	R/W Delay	Req Torqu	GWt	
2		171 FT	100I	900M	+13C	263	00+01+20	2.2 NM	6				
		2.5W			280	263	23:49:25	2.2 NM	579				2879
3		151 FT	100I	900M	+13C	298	00+00+51	1.4 NM	4				
		2.5W			280	298	23:50:16	3.7 NM	575				2875
4	.PT BEND	N 30 43.53	174 FT	100I	900M								2868
		W 087 07.61	2.4W										
5	.TREE FIEL	N 30 45.25	180 FT	100I	900M								2861
		W 087 09.70	2.4W										
6	.CHUMUCKL	N 30 49.94	52 FT	100I	900M								2838
		W 087 17.53	2.3W										
7	.MCDAVID II	N 30 52.10	66 FT	90G	500A								2830
	CP1	W 087 19.39	2.4W										
8	.ROAD JUNI	N 30 50.99	240 FT	90G	500A								2811
	CP2	W 087 26.20	2.3W				00:03:59	25.7 NM	511				
9	.RL/RD JUN	N 30 53.15	259 FT	90G	500A								2798
	CP3	W 087 30.32	2.2W				00:06:45	29.8 NM	498				
10	.PL/RD JUN	N 30 51.50	210 FT	90G	500A								2786
	CP4	W 087 34.57	2.2W				00:09:25	33.8 NM	486				
11	.ROAD JUNI	N 30 52.02	203 FT	90G	500A								2767
	CP5	W 087 41.67	2.1W				00:13:30	40.0 NM	467				
12	.PIPE JUNC	N 30 49.21	249 FT	90G	500A								2758
	CP6	W 087 41.88	2.1W				00:15:23	42.8 NM	458				
13	.BRIDGE	N 30 39.83	49 FT	90G	500A								2727
	CP7	W 087 38.37	2.1W				00:21:56	52.6 NM	427				
14	.BRIDGE (I-1	N 30 36.33	26 FT	90G	500A								2709
	CP8	W 087 32.83	2.2W				00:25:53	58.5 NM	409				
15	.ROAD JUNI	N 30 40.10	164 FT	90G	500A								2692
	CP9	W 087 28.30	2.2W				00:29:30	64.0 NM	392				
16	.HWY29/19E	N 30 40.78	190 FT	90G	500A								2672
	CP10	W 087 20.94	2.3W				00:33:45	70.3 NM	372				
17	.TRI FACTOI	N 30 39.00	151 FT	90G	700M								2665
		W 087 19.14	2.3W				00:35:20	72.7 NM	365				
18	.BASEBALL	N 30 37.12	141 FT	90G	700M								2658
		W 087 20.30	2.3W				00:36:45	74.8 NM	358				
19	.KINGS FIEL	N 30 34.93	144 FT	90G	700M								2651
		W 087 20.69	2.3W				00:38:13	77.0 NM	351				
20	.SITE 8	N 30 32.57	135 FT	90G	700M								2643
		W 087 22.07	2.3W				00:39:58	79.7 NM	343				
21	.SITE 8	N 30 32.57	135 FT	90G	700M								2643
		W 087 22.07	2.3W				00:00+00	0.0 NM	0				
22	.KINGS FIEL	N 30 34.93	144 FT	90G	700M								2635
		W 087 20.69	2.3W				00:39:58	79.7 NM	343				
23	.BASEBALL	N 30 37.12	141 FT	90G	700M								2628
		W 087 20.30	2.3W				00:41:44	82.3 NM	335				
24	.TRI FACTOI	N 30 39.00	151 FT	90G	700M								2622
		W 087 19.14	2.3W				00:43:12	84.5 NM	328				
25	.HWY29/19E	N 30 40.78	190 FT	90G	500A								2622
		W 087 19.14	2.3W				00:44:37	86.6 NM	322				

Route Point | Route | Window | Help

- Insert New | Ctrl+I
- Delete | Ctrl+U
- Leg Editor... | Ctrl+L
- Fuel Options...
- Clock... | Ctrl+K

To adjust Fuel Burn, highlight the checkpoint, then click on 'Leg Editor'





Green Route 1.jrt

Turn Pt	Type	Fix/Point Desc	Latitude	Longitude	Elev	Aspd	Altitude	Temp	MH	Leg Time	Leg Dist	Leg Fuel	R/W Delay	Avail Torq	Remark1	Remark2
Comma1	DTD				MV	Bank	Wind	FF	MC	Clock Time	Total Dist	Total Fuel	R/W Delay	Req Torqu	GWT	
2		.PT BAKER	N 30 41.44	W 087 03.53	171 FT	100I	900M	+13C	263	00+01+20	2.2 NM	6				
3		.PT POND	N 30 42.06	W 087 05.03	151 FT	100I	900M	+13C	298	23:49:25	2.2 NM	579			2879	
4		.PT BEND	N 30 43.53	W 087 07.61	174 FT	100I	900M	+13C	306							
5		.TREE FIELD	N 30 45.25	W 087 09.70	180 FT	100I	900M	+13C	316							
6		.CHUMUCKL	N 30 49.94	W 087 17.53	52 FT	100I	900M	+13C	307							
7		.MCDAVID II	N 30 52.10	W 087 19.10	225 FT	100I	900M	+13C	300							
8		.ROAD JUNI	N 30 50.00	W 087 10.00												
9		.RL/RD JUN	N 30 50.00	W 087 10.00												
10		.PL/RD JUN	N 30 50.00	W 087 10.00												
11		.ROAD JUNI	N 30 50.00	W 087 10.00												
12		.PIPE JUNC	N 30 49.00	W 087 10.00												
13		.BRIDGE	N 30 39.00	W 087 10.00												
14		.BRIDGE (I-1)	N 30 36.00	W 087 10.00												
15		.ROAD JUNI	N 30 40.00	W 087 10.00												
16		.HWY29/19E	N 30 40.00	W 087 10.00												
17		.TRI FACTOI	N 30 39.00	W 087 10.00												
18		.BASEBALL	N 30 37.00	W 087 10.00												
19		.KINGS FIEL	N 30 34.55	W 087 20.69	144 FT	90G	700M	+14C	151	00+01+28	2.2 NM	7				
20		.SITE 8	N 30 32.57	W 087 22.07	135 FT	90G	700M	+14C	209	00+01+45	2.6 NM	8				
21		.SITE 8	N 30 32.57	W 087 22.07	135 FT	90G	700M	+14C	209	00+00+00	0.0 NM	0				
22		.KINGS FIEL	N 30 34.93	W 087 20.69	144 FT	90G	700M	+14C	029	00+01+45	2.6 NM	8				
23		.BASEBALL	N 30 37.12	W 087 20.30	141 FT	90G	700M	+14C	011	00+01+28	2.2 NM	7				
24		.TRI FACTOI	N 30 39.00	W 087 19.14	151 FT	90G	700M	+14C	030	00+01+25	2.1 NM	7				
25		.HWY29/19E	N 30 40.78	W 087 19.14	190 FT	90G	500A	+14C	321	00+01+34	2.4 NM	7				

Enter desired fuel burn in gal/hour based on airspeed. (there is no decimal point - ie 26.0 gal/hour is entered as '260')

Leg Editor - Green Route 1.jrt

FPM Mode Inputs

REPLICATE	ID	VALUE	UNITS
<input type="checkbox"/>	Fuel Flow	260	gal/hr

Path Points: 3,4,5,6,7,8,9,10,11,12,13 ...40

Replicate Data from Focus Point #3 to Point # 40

Fuel Flow % Increase: 0

Climb/Descent Apply Mode When Altitude Changes By: 2000 feet

Winds: Enforce Ground Speed:

Point #: 3

Replicate airspeed for multiple checkpoints

- Mission Binders
  - Open Planning Data
    - Green Route
      - View Folders
        - View 2
          - Green Route

View 2 - Green Route 1.jrt\*

Green Route 1.jrt

Turn Pt	Type	Fix/Point	Latitude	Elev	Aspd	Altitude	Temp	MH	Leg Time	Leg Dist	Leg Fuel	R/W
Comma	DTD	Desc	Longitude	MV	Bank	Wind	FF	MC	Clock Time	Total Dist	Total Fuel	R/W
1	OR		N 30 41.83	177 FT		500A	+14C					
OR			W 087 00.98	2.5W					23:33:05		655	
		.orbit	N 30 41.83	177 FT	90T	500A	+14C	002	00+15+00	0.0 NM	70	
		W 087 00.98		2.6W			280	002	23:48:05	0.0 NM	585	
2		.PT BAKER	N 30 41.44	171 FT	100L	900M	+13C	263	00+01+20	2.2 NM	6	
3		.PT POND							00+51	1.4 NM	4	
4		.PT BEND							00+16	3.7 NM	575	
5		.TREE FIEL							01+35	2.7 NM	7	
6		.CHUMUCK							01+51	6.3 NM		
7		.MCDAVID I							01+29	2.5 NM		
8		CP1							03+19	8.8 NM		
9		.ROAD JUN							04+53	8.2 NM		
10		CP2							08+12	17.0 NM		
11		.ROAD JUN							01+47	2.7 NM		
12		CP3							00+00	19.7 NM		
		.PL/RD JUN							03+59	8.0 NM		
		CP4							03+59	8.0 NM		
		.PIPE JUNC							03+59	8.0 NM		
		CP5							03+59	8.0 NM		
		MIDGE							03+59	8.0 NM		
		MIDGE II-1	N 30 36.33	26 FT	90G	500A	+14C	128	00+03+57	5.9 NM	18	

JMPS Forms Printing Wizard - Step 1

Form(s) Selection

E:\data\Local\JMPS\Data\Forms\HT-18.dot

Restore Intro

Remove Add...

Cancel Help Security... < Back Next > Finish

To print HT-18 route cards, click 'ADD'

Then select the 'HT-18' file



# Example Route Card



\*\*\* UNCLASSIFIED \*\*\*

CHECKPOINT NAME/NO. LAT LONG	HDNG	DIST LEG REMN	TIME LEG REMN REAL	FUEL LEG REMN	REMARKS
.KNDZ/A N 30 41 49.690 W 087 00 58.871		100.8	01+23+50 23:48:08	562	
.PT BAKER N 30 41 29.400 W 087 03 21.600	263	2.1 98.7	00+01+14 01+22+36 23:49:22	5 557	
.PT POND N 30 42 03.000 W 087 05 03.600	293	1.6 97.1	00+00+56 01+21+40 23:50:18	4 552	BT 9 4777
.PT BEND N 30 43 23.371 W 087 07 33.879	304	2.5 94.6	00+01+31 01+20+09 23:51:49	7 545	
.TREE FIELD N 30 45 09.000 W 087 10 22.800	308	3.0 91.6	00+01+47 01+18+22 23:53:36	8 537	
.CHUMUCKLA N 30 50 02.560 W 087 16 55.262	313	7.5 84.1	00+04+26 01+13+56 23:58:02	21 516	BT 19
.MCDAVID INTER N 30 52 06.000 W 087 19 23.400	316	3.0 81.2	00+01+58 01+11+58 00:00:00	9 507	CP1 BT 14
.ROAD JUNC N 30 50 59.373 W 087 26 12.000	262	6.0 75.2	00+03+59 01+07+59 00:03:59	19 488	CP2
.RL/RD JUNC N 30 53 09.000 W 087 30 19.200	303	4.1 71.1	00+02+46 01+05+13 00:06:45	13 476	CP3

Add additional information in 'Remarks' such as freq, squawk, and altitude changes





# Low Level Navigation



- Plan Cont'd
  - Additional Fuel Planning
    - Mission Fuel - is the fuel necessary to complete the mission plus extra fuel desired by the mission commander. Mission commanders consider contingencies that may result in delay.
    - Go/No Go Fuel – Introduce other Go/No-Go criteria such as number of aircraft, weather, equipment, enemy, etc.
    - Bingo Fuel – Minimum calculated fuel state necessary to arrive at the closest fuel source with NATOPS minimum fuel.
      - There can be multiple Bingo Fuels
  - Map Study
    - JMPS Sky View
    - Google Earth



# Low Level Navigation



- Plan Cont'd
  - Map Preparation
    - Include Course Rules Heading/Distance/Time
    - Frequency and Squawk changes
    - Bingo CP arrow and information box



# Low Level Navigation



- Brief
  - Time Hack
    - Ensure accurate time hack at the beginning of the brief
    - Naval Observatory – 202-762-1401
  - Route Brief
    - Have a template to brief from CP to CP
      - Heading, Distance, Time, Intermediate CPs, Aiming features, Funneling and Limiting Feature
  - Brief LZ Considerations
    - NATOPS Landing Site Evaluation (17.6.2)
      - SWEEP Checks on the way
    - SNAs should brief from imagery that has been provided in the briefing spaces



# Low Level Navigation



- Brief Cont'd
  - Using appropriate Maps
    - Pensacola Jog and Topographic Map for Orange/Purple
  - Disorientation Procedures
    - Brief direction and airspeed of holding
      - Ex: Right hand turns, 50 KIAS(Bucket Airspeed)



# Low Level Navigation



- Execution
  - Fuel Checks
    - Go/No-Go at each CP
    - Time on Station – Time needed for external agencies (FAC, BFHO, etc). Use fuel burn for specific profile.
    - Fuel remaining in gallons – Used internally for Bingo
  - Route Timing
    - CP1 to Last CP
    - At IP's discretion, may introduce concept of TOT.



# Formation Low Level Nav



- Time Hack is mandatory -  $\geq 30$  sec
- Smart Pack includes: Cover sheet stapled upper left corner, names highlighted, pg # of #, Eastern Form Area Diagram, OLF Diagram, Route cards
- Required Charts: Pensacola JOG AIR & Purple Route 1:50,000 (proper use of the map change over point)
- Brief all towers in AGL vice MSL
- Descend to 500' AGL at Deaton Bridge & make traffic calls on BTN 15/16
- At CP1 execute 6Ts (don't transition to route alt (200' AGL) until after crossing CP1 then switch to Combat Cruise formation, twist RADALT to 150')
- Execute "Lima Delta" after CP10 climb to 500' AGL slow to 80 KIAS following the pipeline slash to the East, teardrop to re-establish section westbound for CP10
- At CP 10 execute 6Ts descend to route alt (200" AGL) & accel to 100 kts
- At CP1 climb 700' MSL, call clear, pos switch with check in to BTN 15 monitor then positive switch with check in to BTN 12.
- Be prepared to execute disorientation procedures
- SWEEP checks for Harold: Brief anticipated CRS, plan to split, Wing will be in position on the wind side during the split, intended spot/lane, max number sections, alternate plan if full, departure plan (re-split/taxi re-split for departure)



# NVG Low Level Nav



- Incorporate NVG Considerations during the mission brief
  - Illumination – natural and artificial
  - Terrain Contrast – utilizing satellite imagery (terminal environment and LZ) and the map
  - Atmospheric Obscurations – current and forecast
- Terminal Area/LZ Brief
  - Utilize both satellite imagery AND an LZ diagram
    - Satellite imagery for terrain discussion/albedo contrast
    - LZ diagram for inclusion in smart pack and symbology (see following slide for Florala example LZ Diagram)
    - Ensure any chum'd/NOTAM obstructions are included on both

**FLORALA (0J4) LZ** N 31 02 32.5 W 086 18 42.05  
 3197' X 75' Asphalt Runway (22/04)  
 Trees (75' AGL) SE / Power lines (50' AGL) NE  
 Winds: \_\_\_/\_\_\_(Forecast)  
 Elevation: 314' MSL  
 Egress:  
 Pr vs. Pa: HIGE/HOGE: \_\_\_/\_\_\_%, Pa = 100% Q (5 min)



**Lunar Data**  
 Illumination:  
 Angle:  
 Azimuth:

Cairns Approach	133.45
TAD (1) Florala UNICOM	123.0
Eastern Common	BTN 20
KNDZ Tower	BTN 4

**Primary Pattern:**   
**Alternate Pattern:** 

UNCLASSIFIED



# *Takeaways for SNAs*



- Start with what is in the FTI and RWOP
- Utilize planning documents and videos on Factoryhand University
- Practice your brief!



***QUESTIONS? CONTACT HT-18 STAN.***