

050724I

TD 7 - Genesis / IFEX

M. Black

Lead Project Scientist

Preflight

- MB 1. Participate in general mission briefing.
- MB 2. Determine specific mission and flight requirements for assigned aircraft.
- MB 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- MB 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Review field program safety checklist
 - c. Arrange ground transportation schedule when deployed.
 - d. Determine equipment status.
- MB 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- MB 5. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
- MB 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami).
- MB 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- MB 7. Make sure each HRD flight crew members have life vests
- MB 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.
- MB 8. Collect "mess" fee (\$2.00) from all on-board HRD flight crew members.

In-Flight

- ___ 1. Confirm from AOC flight director that satellite data link is operative (information).
- ___ 2. Confirm camera mode of operation.
- ___ 3. Confirm data recording rate.
- ___ 4. Complete Lead Project Scientist Form.
- ___ 5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

- ___ 1. Debrief scientific crew.
- ___ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- ___ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- ___ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ___ 5. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- ___ 6. Obtain a copy of the all VHS videos from aircraft cameras (3-4 approx.). Turn in with completed forms.
- ___ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.
- ___ 8. Determine next mission status, if any, and brief crews as necessary.
- ___ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- ___ 10. Prepare written mission summary using Mission Summary form (due to Field Program Director a week after the flight).

Lead Project Scientist Check List

Storm or Project TD7/Genesis Experiment name IFEX/TCSP
 Date 7/24/05 Aircraft 43 Flight ID 050724.I

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Marty Mayeux</u>
Radar	<u>M. Black</u>	Pilots	<u>Phil Kennedy, Tom Shephard, Barry Choy</u>
Workstation	<u>Krystal Valde</u>	Navigator	<u>Devon Brekob</u>
Cloud Physics	<u>Aaron Bousamer</u>	Systems Engineer	
Photographer/Observer		Data Technician	<u>Terry Lynch</u>
/Guests			<u>Damon San Saver, Bill Olney</u>
Dropwindsonde	<u>Krystal Valde</u>	Electronics Technician	
AXBT/AXCP	<u>Aaron Bousamer</u>	Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0024 UTC Location: MacDill

Landing: _____ UTC Location: MacDill

Number of Eye Penetrations: 0

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

12,000 ft, rotating Figure 4, center at ~21° 9.5' (see attached map)
~20 sondes evenly spaced, 8 axbts
may shorten legs or cut to accommodate
convective burst mode w/ ER2. NASA
ER2 to be coordinated on all legs, F/A
radar except for ~20 miles CPA ER2.

E. —Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / Cds /Expendables/ Printouts
Radar/LF	✓	✓		
Doppler Radar/TA	✓	✓		
Cloud Physics	✓	✓		
Data System	✓	✓		-
GPS sondes	✓	✓		
AXBT/AXCP	✓			
Ozone instrument	—			
Workstation	✓			
Videography	—			

REMARKS:

Lead Project Scientist Event Log

Date 7/24/04 Flight M1B12C LPS 050724I

Time	Event	Position	Comments
0237	ATIP Hdg SW 23° 92°W		rain shield ahead ~ 125 miles
0245	E wind 30 kt		
025824	AXBT 1 + Drop 1	22° 43' 24" 98° 25' 44"	
030820	Drop 2	21° 29' 94" 94° 00' 25"	
031859	Drop 3	20° 58' 94" 44"	
	Disorganized mod-wreck convection		
032356	Drop 4 AXBT 1	19° 01' 50"	
033102	Drop 5	20° 21' 95" 30"	North winds 10 kts
033644	Drop 6	20° 06' 95° 49'	North wind
0343	19° 50' 95° 40'	NNW wind 10-15 kts	
035549	Drop 7	18° 58' 94° 57'	NW wind 12 kt
040906	Drop 18	18° 34' 94° 26'	West wind 5 kt
040817	Drop South wind	18° 22' 97° 7'	
041005	Turn to North		
041105	18° 32' 94°	South wind 2°	Drop
0416	18° 54' 94°	SW wind 3 kts	
0422	East wind again	19° 30' 94°	
043037	Rainband Drop AXBT		
043157	Turn to NNW w/ ER2		slightly behind
0442	Beginning of a boxed convection		
	burst mode w/ ER2		
044454	Drop in conv. cell		
045503	Drop #1		Outside of convection
045512	Turn to SW corner of box		
050356	Continuous ER2 overhead		
	Start storm w/ conv. cell		
0505	ER2 overhead		

no
5° wind

no
winds
late
winds

Drop
10

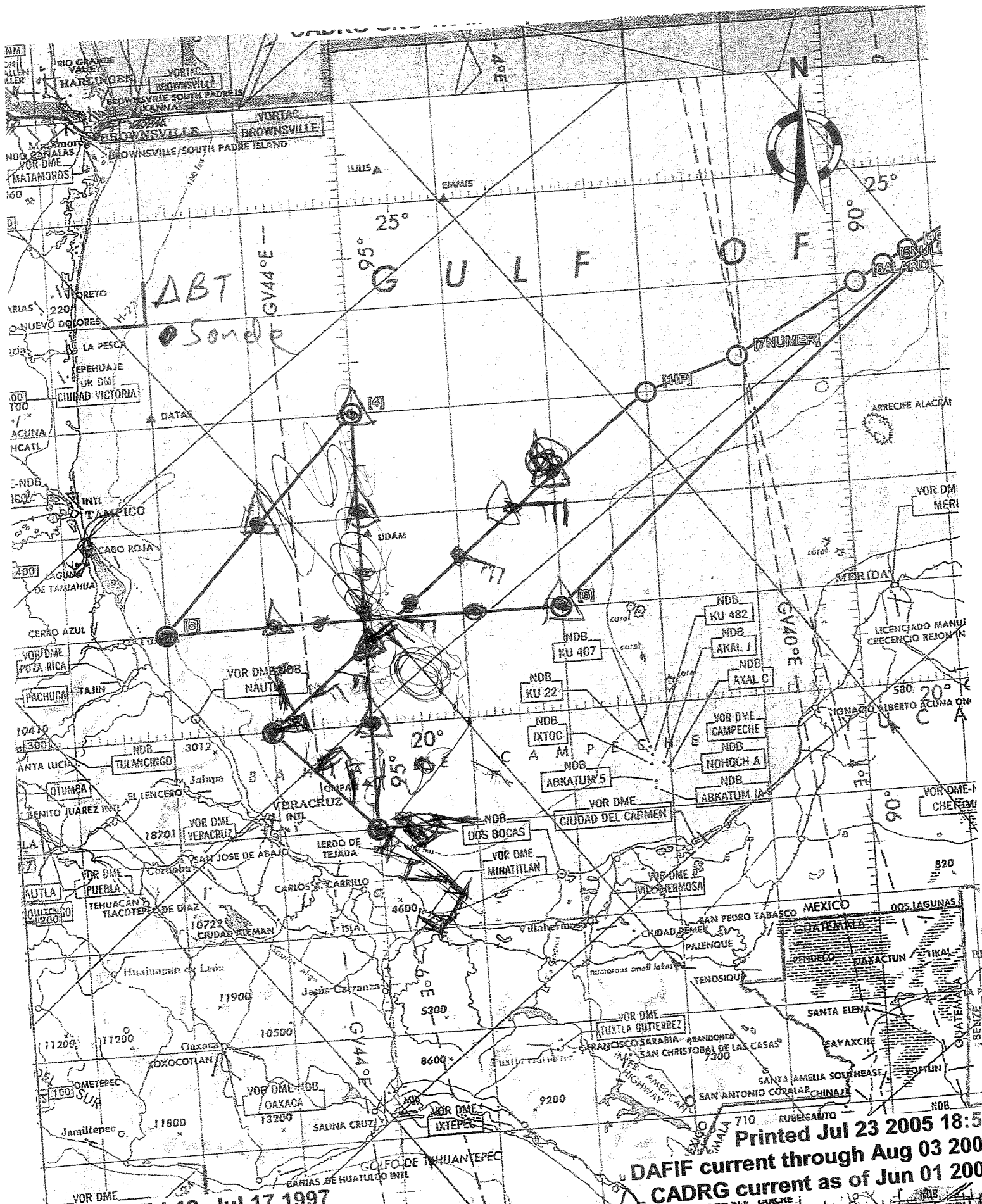


Lead Project Scientist Event Log

Date _____ Flight _____ LPS M. Black

Time	Event	Position	Comments
050935	SW corner, ER box		
	Back to F/AST		
052347	Drop between cells		
0524	turn west through stratiform		
0531	Doing a spiral turn to wait for ER2		
0535	Entered		
053558	Drop 14		
0535-0539	ER2 overtop in stratiform		
0545	heading back to rainband, will fly outside of band, ER2		
0547	Drop 15 edge of stratiform		
0553	Following inside edge of rainband		
0558	Drop 16 next to band		
0606	Drop 17 + AXBT - 29.0°C		
0608	ER2 overtop to left - doing JGC		
	Frequent lightning		
0619	Exit turn south of rainband		
062057	Drop 18 + AXBT south of band		
0624	Turn to North inside of band		
0628	Drop 19 2046 9449'		
063458	Drop 20 Between Bands AXBT		
063758	Drop 21 Back in band 29.2		
	AXBT 100 nmi to NE		
	AXBT 200 nmi to NE		
0928	Landing - Marshall		

no
wind



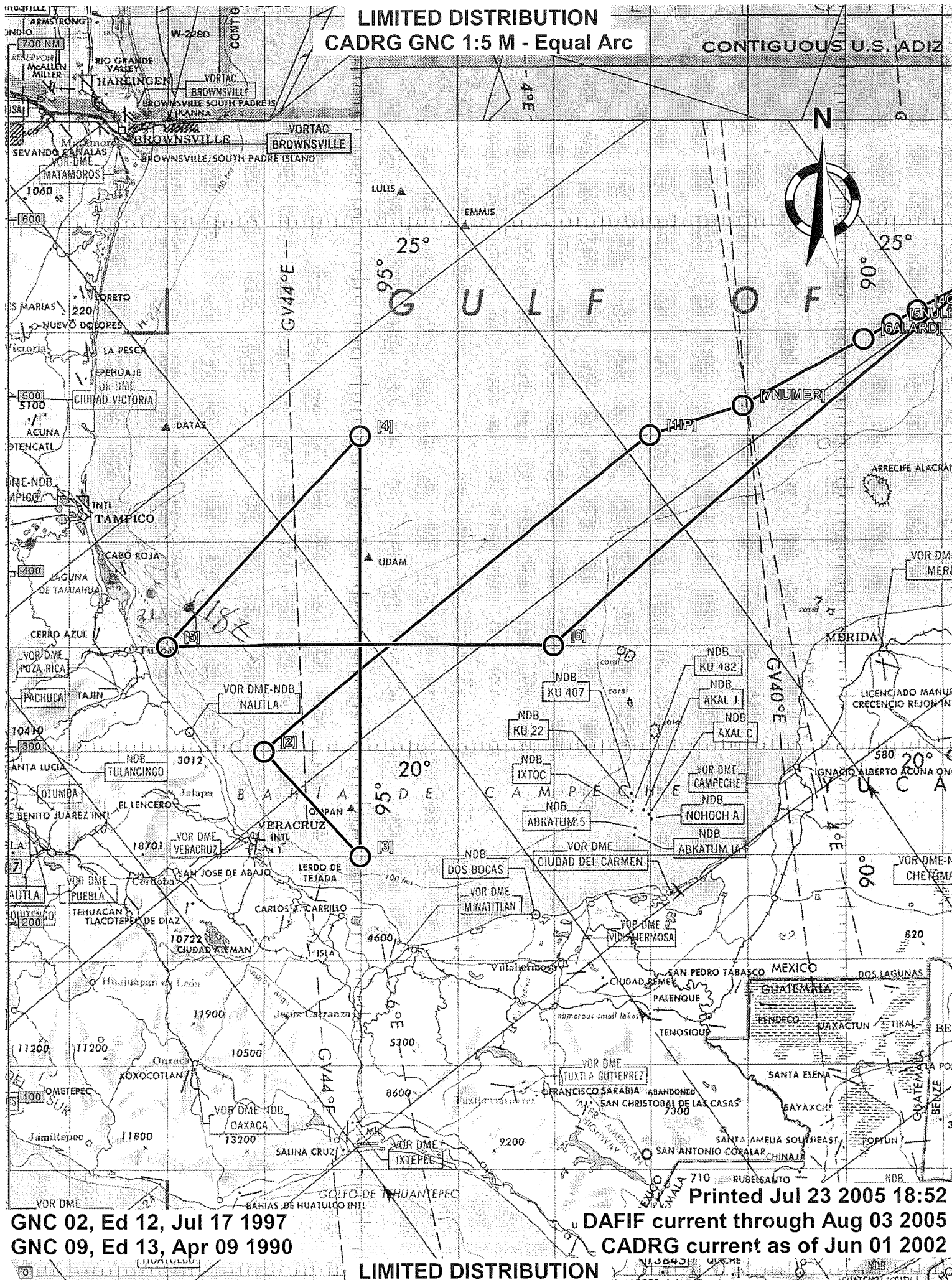
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