

**AIRCRAFT
ACCIDENT INVESTIGATION BOARD
REPORT**

**US ARMY UH-60
BLACK HAWK HELICOPTERS
87-26000 AND 88-26060**

VOLUME 18

TABS W thru Z

**AIRCRAFT
ACCIDENT INVESTIGATION BOARD
REPORT**

COPY

15

OF

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**AFR 110-14 AIRCRAFT ACCIDENT BOARD
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TAB W

WEATHER OBSERVATIONS

W-1 AWS Form 10b, Surface Weather Observation, Zakhu

W-2 DD Form 175-1, Flight Weather Briefing

W-3 USAFE Form 0-273, Mission Weather Flimsy

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TAB W

WEATHER OBSERVATIONS

W-1 AWS Form 10b, Surface Weather Observation, Zakhu

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W-3 USAFE Form 0-273, Mission Weather Flimsy

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FLIGHT WEATHER BRIEFING

PART I - MISSION/TAKEOFF DATA

1. DATE (YYMMDD) 940414	2. ACFT TYPE/NO. UH60/ED1	3. DEP PT/ETD LTCC/0520	4. RUNWAY TEMP °F/C	5. DEWPOINT °F/C	6. TEMP DEV °C	7. PRESSURE ALT FT	8. DENSITY ALT FT
9. SFC WIND M 31 1005		10. CLIMB WINDS		11. LOCAL WEATHER WARNING/ADVISORY		12. RCR	
13. REMARKS/TAKEOFF ALTN FCST							

PART II - ENROUTE DATA

4. FLT LEVEL 075	15. FLT LEVEL WINDS/TEMP 010 110 79							
6. CLOUDS AT FLT LEVEL NONE			17. MINIMUM VISIBILITY AT FLT LEVEL OUTSIDE CLOUDS 9999					MILES DUE TO
YES	NO	IN AND OUT	SMOKE	DUST	HAZE	FOG	PRECIPITATION	NO OBSTRUCTION
8. MINIMUM CEILING FT AGL		LOCATION	19. MAXIMUM CLOUDS TOPS FT MSL		LOCATION	20. MINIMUM FREEZING LEVEL FT MSL		LOCATION
21. THUNDERSTORMS		22. TURBULENCE			23. ICING		24. PRECIPITATION	
IWA/WW NO. NONE		CAT ADVISORY			Z		NONE	
NONE	AREA	LINE	NONE	IN CLEAR	IN CLOUD	RIME	MIXED	CLEAR
ISOLATED 1-2%			LIGHT			TRACE		
FEW 3-15%			MOD			LIGHT		LT
SCATTERED 16-45%			SVR			MOD		MOD
NUMEROUS - MORE THAN 45%			EXTREME			SVR		HVY
25. SEVERE TURBULENCE & ICING, HEAVY PRECIPITATION, LIGHTNING & WIND SHEAR EXPECTED IN AND NEAR THUNDERSTORMS.		LEVELS			LEVELS		FRZG	
LOCATION		LOCATION			LOCATION		LOCATION	

PART III - TERMINAL FORECASTS

25. AIRDROME	26. CLOUD LAYERS	27. VSBY/WEA	28. SFC WIND	29. ALTIMETER	30. VALID TIME
DEST/ALTN ZAKHD	clear	9999	5.3 5+ V+5	2975 INS	Z TO Z
DEST/ALTN TADR	clear	9999	V+5	2975 INS	Z TO Z
DEST/ALTN LTCC	clear	9999	310/08	2990 INS	Z TO Z
DEST/ALTN				INS	Z TO Z
DEST/ALTN				INS	Z TO Z
DEST/ALTN				INS	Z TO Z
DEST/ALTN				INS	Z TO Z

PART IV - COMMENTS/REMARKS

BRIEFED ON LATEST RCR FOR DESTN AND ALTN	YES	NOT AVAILABLE	32. REQUEST PIREP AT
--	-----	---------------	----------------------

REMARKS
No changes

CERTIFICATE

I certify that I am the Records Custodian for the Accident Investigation Board convened to investigate the crash of two U.S. Army Black Hawk helicopters in the no fly zone in northern Iraq on 14 April 1994, and that this is a true and accurate copy of the record which is kept in my records system.

W-5411
WILLIAM L. HARRIS, Capt, USAF, MSC
 Evidence Custodian, Incirlik Air Base, Turkey

15 May 94
 Date

PART V - BRIEFING RECORD

WEA BRIEFED 0320	35. FLIMSY BRIEFING NO. Z	36. FORECASTER'S SIGNATURE OR INITIALS	
VOID TIME 0450	38. EXTENDED TO 0620	39. WEA REBRIEFED AT 0450	40. FORECASTER'S INIT JR
41. NAME OF PERSON RECEIVING BRIEFING MCKENNA		18	

TAB W

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W-3 USAFE Form 0-273, Mission Weather Flimsy

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MISSION WEATHER (FLIMS)		1. VT. 032-152	2. DATE 14 APR 94	3. FCST NO. 01	4. INITIALS 91
SVR TURB/CG, HAIL, LIGHTNING, POLC > 80%, & WIND SHEAR ASSOC. W/ YSTMS					
5. THUNDERSTORMS		6. TURBULENCE		7. ICING	
TOPS: 350 COVERAGE: F3 ISOL		LGT: ^ MDT: ^ SVR: ^		RIM CLR MXD LGT: U U U MOT: U U U SVR: U U U	
8. LOCAL WX ADVISORIES/WARNINGS					
NONE					
9. INCIRLIK AIRFIELD FORECASTS					
LOCATION	CLOUD LAYERS	VSBY/WX	WIND	ALSTC	
INCIRLIK AB (288) LYAG/KQDG	SKC	9999	03005	2985	
MAX T: 7300					
PA: 732	BY 10Z		21006		
Air refueling and AWACS cloud bases and heights are AGL					
AIR REFUELING AREA		IC:	FL160		
R021	SKC	OC: 9999	32015		
R022			FL250		
			30020		
AWACS		IC:	FL300		
R023		OC: 9999	28000		
CONTRAIS MOD: 200-300 HWY: ABV 300					
10. EN ROUTE WINDS					
	5,000 FT	10,000 FT	20,000 FT	30,000 FT	
S/CEN TURKEY	16010/+16	23010/+4	32015/-16	26025/-44	
S.E. TURKEY	05010/+12	01010/+2	27010/-15	27030/-43	
11. NORTHERN IRAQ LOW-LEVEL WINDS AND TEMPERATURES					
WINDS				TEMPS	
005: 13010	010: 13010	020: 13010	010: +21	C	
030: -13015	050: 14015	070: 14020	020: +19	C	
WX PMSV Rad'n is limited - use Incirlik Global Airways: HF = 9999 UHF = 9999 257.75					

USAF FORM O-273, OCT 92

(OVER)

CERTIFICATE Front & Back Redlined

I certify that I am the Records Custodian for the Accident Investigation Board convened to investigate the crash of two U.S. Army Black Hawk helicopters in the no fly zone in northern Iraq on 14 April 1994, and that this is a true and accurate copy of the record which is kept in my records system.

9 May 94
Date

W. L. Harris
WILLIAM L. HARRIS, Capt, USAF, MSC
Evidence Custodian, Incirlik Air Base, Turkey

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12. INCIRLIK SOLAR/LUNAR DATA
 ILLUMINATION 12 % SUNRISE: 14 / 0236z MOONRISE: 14 / 0454z NVG START: BLO / MIN 8z
 SUNSET: 14 / 1540z MOONSET: 14 / 1854z NVG STOP: BLO / MIN 8z

13. ALTERNATE AIRFIELD FORECASTS

LOCATION	CLOUD LAYERS	VSBY/WX	WINDS	ALSTG
DIYAR./BATMN (2254/1819)LTCC/LTCJ	SKC	9999	VRB05	¹⁰¹³ 29.90
MAX T: +26 / +26 PA: +2225 / +1840				
ERHAC (2827) LTAT	SCT250	9999	VRB05	¹⁰¹¹ 29.85
MAX T: +26 PA: +2700				
ZAHKU (1500)	SKC	9999	VRB05	¹⁰⁰⁷ 29.75
MAX T: +25 PA: +2660				
EAST A.O.R. (2500)	SKC	9999	VRB05	¹⁰⁰⁷ 29.75
MAX T: +24 PA: +2660				
WEST A.O.R. (1000)	SKC	9999	VRB05	¹⁰⁰⁷ 29.75
MAX T: +26 PA: +1160				
ADANA (66) LTAF	SKC	8000 HZ	VRB05	¹⁰¹³ 29.92
MAX T: +32 PA: +66				
KONYA/RANGE (3390) LTAF	SCT 040 / 060	9999	VRB05	¹⁰¹⁴ 29.94
MAX T: +27 PA: +3370				
LTD 13 1600-2000Z	SCT 010 / 060	9999	—	—
MET:				
MET:				
MET:				

14. INCIRLIK SOLAR/LUNAR DATA
 ILLUMINATION 12 % SUNRISE: 14 / 0206z MOONRISE: 14 / 0454z
 SUNSET: 14 / 1612z MOONSET: 14 / 1928z

15. TAKEOFF AND LANDING INFORMATION - INCIRLIK AB

TIME	TEMP	WINDS	ALSTG	PA (FT)	TIME	TEMP	WINDS	ALSTG	PA (FT)
03	+13	03005	29.85	+300	10	+31	21006	29.85	+300
04	+15				11	+32			
05	+16				12	+31			
06	+19				13	+31			
07	+23		29.86	+290	14	+30			
08	+25				15	+28			
09	+29								

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MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology identified the remains of five Kurdish nationals. Presumptively, they were the remains of : Mr. Salid Said, Mr. Ahmad Mohammad, Mr. Bader Mikho, Mr. Ghandi Hussein and Mr. Abdulsatur Arab. A complete autopsy including microscopic evaluation revealed one individual with a kidney stone, another with several small gallstones, and another with severe scoliosis (abnormal curvature of the spine) otherwise there was no significant pre-existing disease. The cause of death for all five individuals was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports. The above abnormalities were incidental findings that did not impact this accident.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

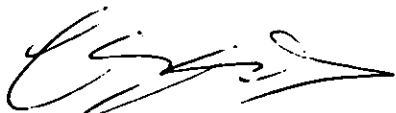
1. The Armed Forces Institute of Pathology positively identified the remains of Col Hikmet Alp (TU). A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

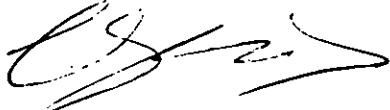
1. The Armed Forces Institute of Pathology positively identified the remains of SSgt Paul N. Barclay. A complete autopsy including microscopic evaluation revealed 60% narrowing of one of his coronary arteries without evidence of heart attack; otherwise, no pre-existing disease was noted. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports. The coronary artery narrowing was an incidental finding that did not impact this accident.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of Spec Cornelius A. Bass showed a flight physical on 1 FEB 94. His distant visual acuity was 20/25 in the right eye and 20/20 in the left eye without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 20 MAY 93 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of Spec Bass. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Lt Ceyhun Civas (TU). A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of Spec Jeffrey C. Colbert showed a flight physical on 5 FEB 93. His distant visual acuity was 20/40 in both eyes which corrected to 20/20 with glasses. His near visual acuity was 20/20 in both eyes without correction. His hearing revealed mild high- frequency hearing loss in both ears. He was qualified for flying duties with glasses. A review of his dental records indicated an exam on 9 FEB 93 without significant problems.
2. The Armed Forces Institute of Pathology positively identified the remains of Spec Colbert. A complete autopsy including microscopic evaluation revealed no pre-existing disease. Cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.

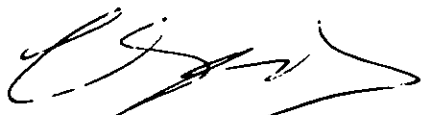


CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

18 10

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Lt Col Guy Demetz (FR). A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of PFC Mark A. Ellner showed a flight physical on 3 DEC 93. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 1 DEC 93 without difficulties.

2. The Armed Forces Institute of Pathology positively identified the remains of PFC Ellner. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.

3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.

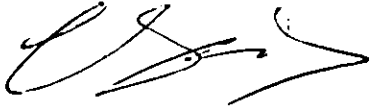
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of W01 John W. Garrett, Jr. showed a flight physical on 10 MAY 93. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam in MAR 94 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of W01 Garrett. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Lt M. Barlas Gultepe (TU) A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of CW02 Michael A. Hall showed a flight physical on 26 JUL 93. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 12 JUL 93 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of CW02 Hall. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT


1. The Armed Forces Institute of Pathology positively identified the remains of SFC Benjamin T. Hodge. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

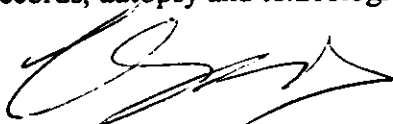
1. A review of the medical records of Capt Patrick M. McKenna showed a flight physical on 12 JAN 94. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 11 JAN 94 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of Capt McKenna. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

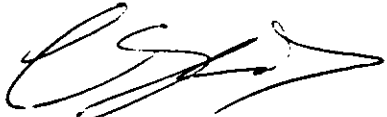
1. A review of the medical records of W01 Erik S. Mounsey showed a flight physical on 12 MAY 93. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing revealed mild high-frequency hearing loss in both ears. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 8 MAR 94 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of W01 Mounsey. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Col Richard A. Mulhern. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of 1 Lt Laura A. Piper. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. A review of the medical records of Spec Michael S. Robinson showed a flight physical on 17 SEP 93. His distant and near visual acuity was 20/20 in both eyes without correction. His hearing test was normal. He was qualified for flying duties without restriction. A review of his dental records indicated an exam on 28 FEB 94 without difficulties.
2. The Armed Forces Institute of Pathology positively identified the remains of Spec Robinson. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
3. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
4. I see no evidence of compromising pre-existent mental or physical defect from review of records, autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of SSgt Ricky L. Robinson. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT


1. The Armed Forces Institute of Pathology positively identified the remains of Barbara L. Schell (USA). A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Maj Harry C. Shapland (UK) A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

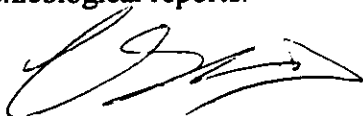
1. The Armed Forces Institute of Pathology positively identified the remains of Lt Col Jonathan C. Swann (UK). A complete autopsy including microscopic evaluation revealed moderate coronary artery obstruction due to cholesterol without evidence of heart attack. He also had three large gallstones. Finally, he had some cholesterol plaques in his abdominal aorta. There were no acute conditions found on autopsy. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports. The above abnormalities were incidental findings that did not impact this accident.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

MEDICAL STATEMENT

1. The Armed Forces Institute of Pathology positively identified the remains of Col Jerald L. Thompson. A complete autopsy including microscopic evaluation revealed no pre-existing disease. The cause of death was multiple blunt force injuries.
2. Urine toxicological screen for drugs and blood alcohol level performed by the Armed Forces Institute of Pathology were negative. Carbon monoxide level was within normal limits.
3. I see no evidence of compromising pre-existent physical defect from review of autopsy and toxicological reports.



CHRISTOPHER J. LISANTI, MAJ, USAF, MC, FS
Flight Surgeon Board Member

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TAB Y

APPOINTMENT DOCUMENTS

Y-1 Appointment Letter, 15 April 1994

Y-2 Special Order Number M-02, 20 May 1994

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12-37



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCES IN EUROPE

15 April 1994

MEMORANDUM FOR Major General James G. Andrus

FROM: CINCUSAFE/CC
Unit 3050 Box 1
APO AE 09094-0501

SUBJECT: AFR 110-14 Aircraft Accident Investigation - ACTION MEMORANDUM

1. By the authority of the Commander in Chief, EUCOM, delegated to me, I hereby appoint you as board president to conduct an investigation into the facts and circumstances surrounding the crash of two US Army Black Hawk helicopters and the possible involvement of US fighter aircraft in the crash of these helicopters in the northern "no-fly zone" of Iraq on 14 April 1994. Other members and associate members of the board will be appointed on orders to assist you in the investigation.
2. Colonels William K. At Lee, Jr., HQ 12 AF/JA, and Charles G. Wilcox, HQ 16AF/JA, Lieutenant Colonels Bryan T. Lawler, HQ 3 AF/JA, and Scott C. Black, OJA, HQ USAREUR, are detailed as legal advisors. Colonel At Lee and Lieutenant Colonel Black are detailed with the concurrence of their commanders. The legal advisors may interview witnesses and carry out other duties as assigned by you.
3. The investigation will be conducted thoroughly and expeditiously in accordance with AFR 110-14 and DODD 6055.7, and will be guided by AFR 120-3. The report will contain a complete factual summary of the evidence and a statement of opinion in accordance with AFR 110-14, Attachment 2. The identity of the military members directly involved in the incident is to be protected to the maximum extent permitted by law. Also, you are to obtain assurances from the associate members of the board, on behalf of their governments, that the identity of the military members directly involved in the incident will be protected.

ROBERT C. OAKS
General, USAF
Commander in Chief

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TAB Y

APPOINTMENT DOCUMENTS

Y-1 Appointment Letter, 15 April 1994

Y-2 Special Order Number M-02, 20 May 1994

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C.E.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCES IN EUROPE
APO AE 09094

SPECIAL ORDER
M-02

20 MAY 1994

By the authority of the Commander in Chief, EUCOM, delegated to CINCUSAFE, the following personnel are appointed to conduct an investigation into the facts and circumstances surrounding the crash of two US Army Black Hawk helicopters and the possible involvement of US fighter aircraft in the crash of these helicopters in the northern "no-fly zone" of Iraq on 14 April 1994. The investigation will be conducted in accordance with AFR 110-14 and DODD 6055.7, and will be guided by AFR 120-3. The report will contain a thorough factual summary of the evidence and a statement of opinion in accordance with AFR 110-14, attachment 2. Board members, associate board members, legal advisors, and technical advisors who are not assigned to the United States Air Forces in Europe are detailed with the concurrence of their commanders or with the concurrence of their governments. This confirms my prior verbal and written orders.

BOARD PRESIDENT

MAJ GEN JAMES G. ANDRUS (██████████)

BOARD MEMBERS

COL PATRICK J. BENNETT (██████████)
COL MICHAEL E. FAIN (██████████)
LT COL WAYNE I. MUDGE (██████████)
LT COL RAY B. SHEPHERD (██████████)
MAJ AARON D. BYAS (██████████)
MAJ CHRISTOPHER J. LISANTI (██████████)
MAJ JEFFREY M. SNYDER (██████████)
1LT GREG A. BROWN (██████████)
CW5 STEVE A. MELINE (██████████)
CW4 DOUGLAS C. SOUSA (██████████)

ASSOCIATE BOARD MEMBERS


LT COL CHRISTIAN VELLUZ (FR)
COL REMZI ARMEN (TU)
GROUP CAPT BARRY P. DOGGETT (UK)

LEGAL ADVISORS

COL WILLIAM K. AT LEE, JR. (██████████)
COL CHARLES H. WILCOX II (██████████)
LT COL SCOTT C. BLACK (██████████)
LT COL BRYAN T. LAWLER (██████████)

TECHNICAL ADVISORS

LT COL BERTRAM H. PRYOR, JR. (██████████)
LT COL LENEAR ROYER III (██████████)
LT COL JOYCE E. TETERS (██████████)
MAJ JAMES R. LITTLE (██████████)
1LT KELLY J. SCOTT (██████████)
CW5 DANIEL W. MEDINA (██████████)
CW2 JOHN B. HALL (██████████)
SSGT FREDDIE L. HOLMES (██████████)
GS-11 CAROLE M. PYLES (██████████)
GS-11 GERALD D. SILVIUS (██████████)
MR DAVID BRUMMELL (UK-LEGAL)


ROBERT C. OAKS
General, USAF
Commander in Chief

**AFR 110-14 AIRCRAFT ACCIDENT BOARD
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- O Additional Substantiating Data Reports**
- P Statement of Damage to Private Property**
- Q Documents Appointing Safety Board (Not Applicable)**
- R Diagrams**
- S Photographs from Safety Report (Not Applicable)**
- T Individual Flight Records/Personnel Records**
- U Aircraft Maintenance Records**
- V Testimony and Statements of Witnesses**
- W Weather Observations**
- X Statements of Death**
- Y Appointment Documents**
- Z Photographs**
- AA Regulations and Directives**
- AB Administration and Glossaries**
- AC Other Documents**

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Y
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TAB Z

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Z-4 E-3B AWACS Senior Director's Console

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TAB Z
PHOTOGRAPHS

- Z-1 Reserved**
- Z-2 Reserved**
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- Z-4 E-3B AWACS Senior Director's Console**

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TAB Z
PHOTOGRAPHS

Z-1 Reserved

Z-2 Reserved

Z-3 UH-60 Black Hawk

Z-4 E-3B AWACS Senior Director's Console

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UH-60 BLACK HAWK HELICOPTER
WITH EXTERNAL FUEL TANKS
AND U.S. FLAGS



TAB Z3
UH-60 BLACK HAWK
HELICOPTER
SHOWING EXTERNAL
FUEL CELLS AND
U.S. FLAGS

TAB Z

PHOTOGRAPHS

Z-1 Reserved

Z-2 Reserved

Z-3 UH-60 Black Hawk

Z-4 E-3B AWACS Senior Director's Console

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TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4h Senior Director's Console, 0727 thru 0730Z

TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4h Senior Director's Console, 0727 thru 0730Z

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E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

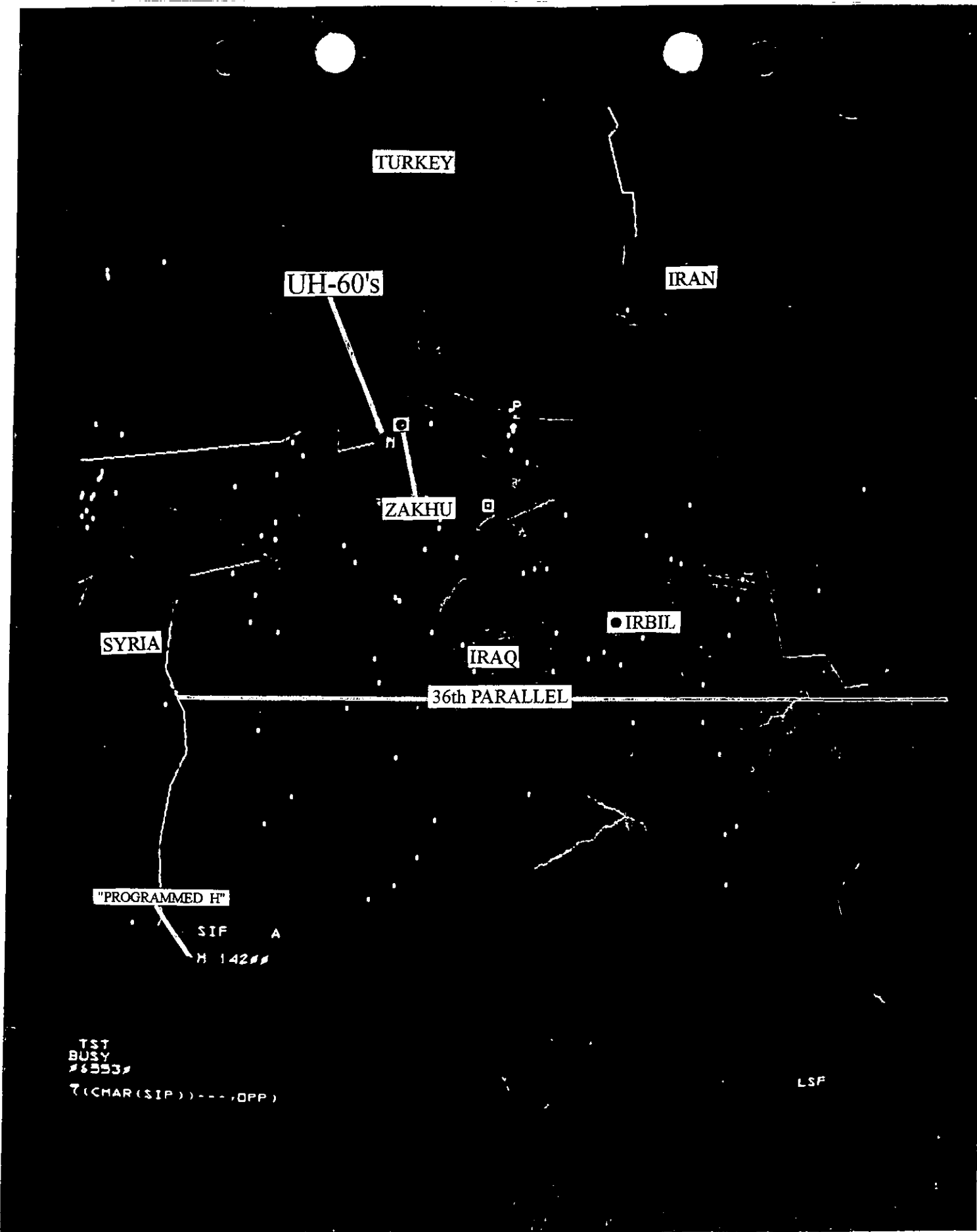
Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4c

Z-4h Senior Director's Console, 0727 thru 0730Z



Z4c1-9 - Photos of replay of the SD's scope from 0655:30Z through 0711:01Z showing that an "H" character was still programmed. They also show an "H" associated with the Black Hawk's IFF proceeding on a southeasterly heading from Zakhu.

11

TURKEY

IRAN

F-15 C's

ZAKHU

● IRBIL

IRAQ

36th PARALLEL

SYRIA

"PROGRAMMED H"

UNASG SY43 SIF
M 14210

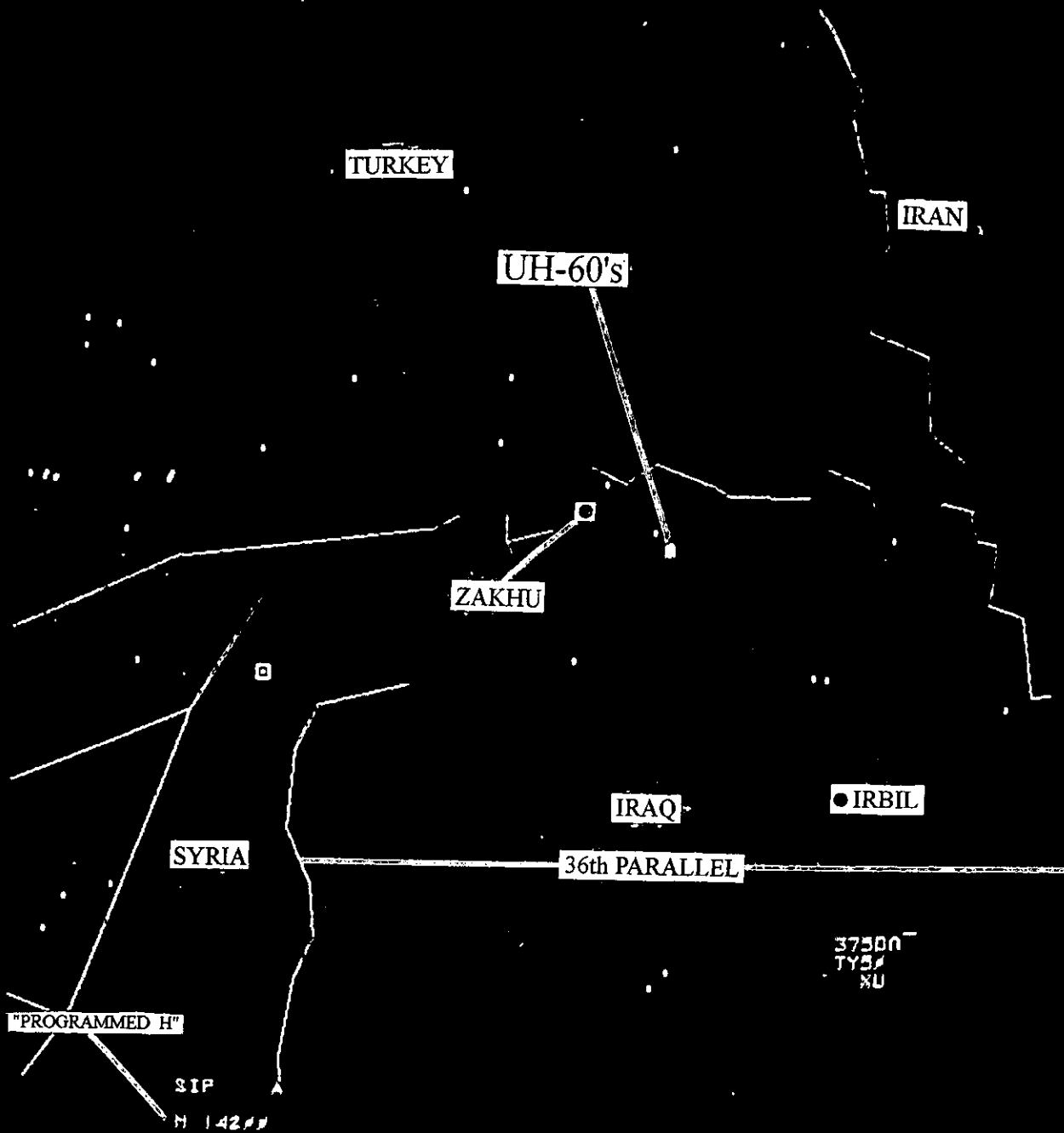
3750
TY3
XU

1783

CHAR (CIP) (---OPP)

LSP

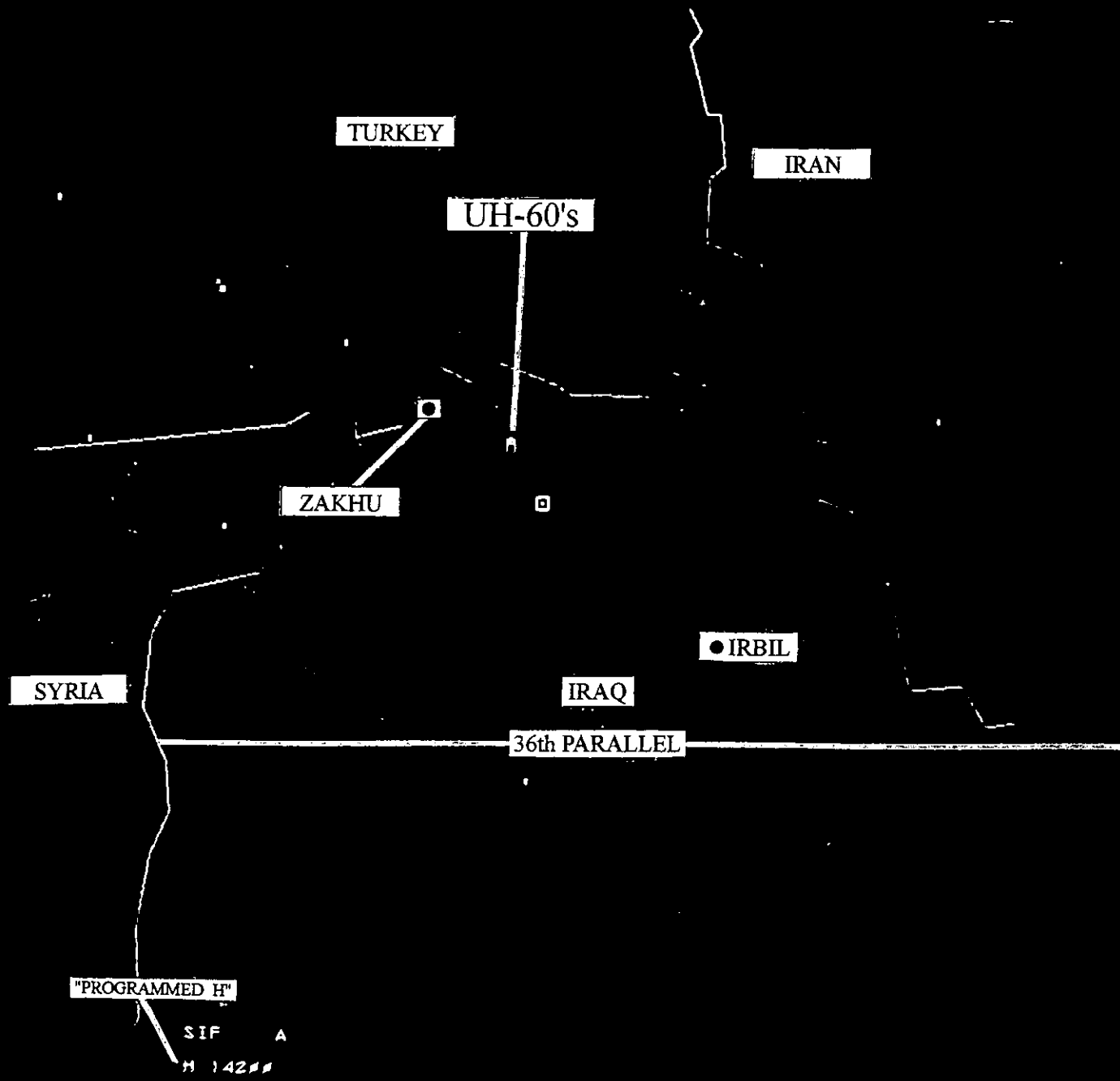
Z4c7 TIME 0708:30Z



#77512
 T(CHAR(SIP))---(OPP)

LSP

Z4c6 TIME 0708:02Z

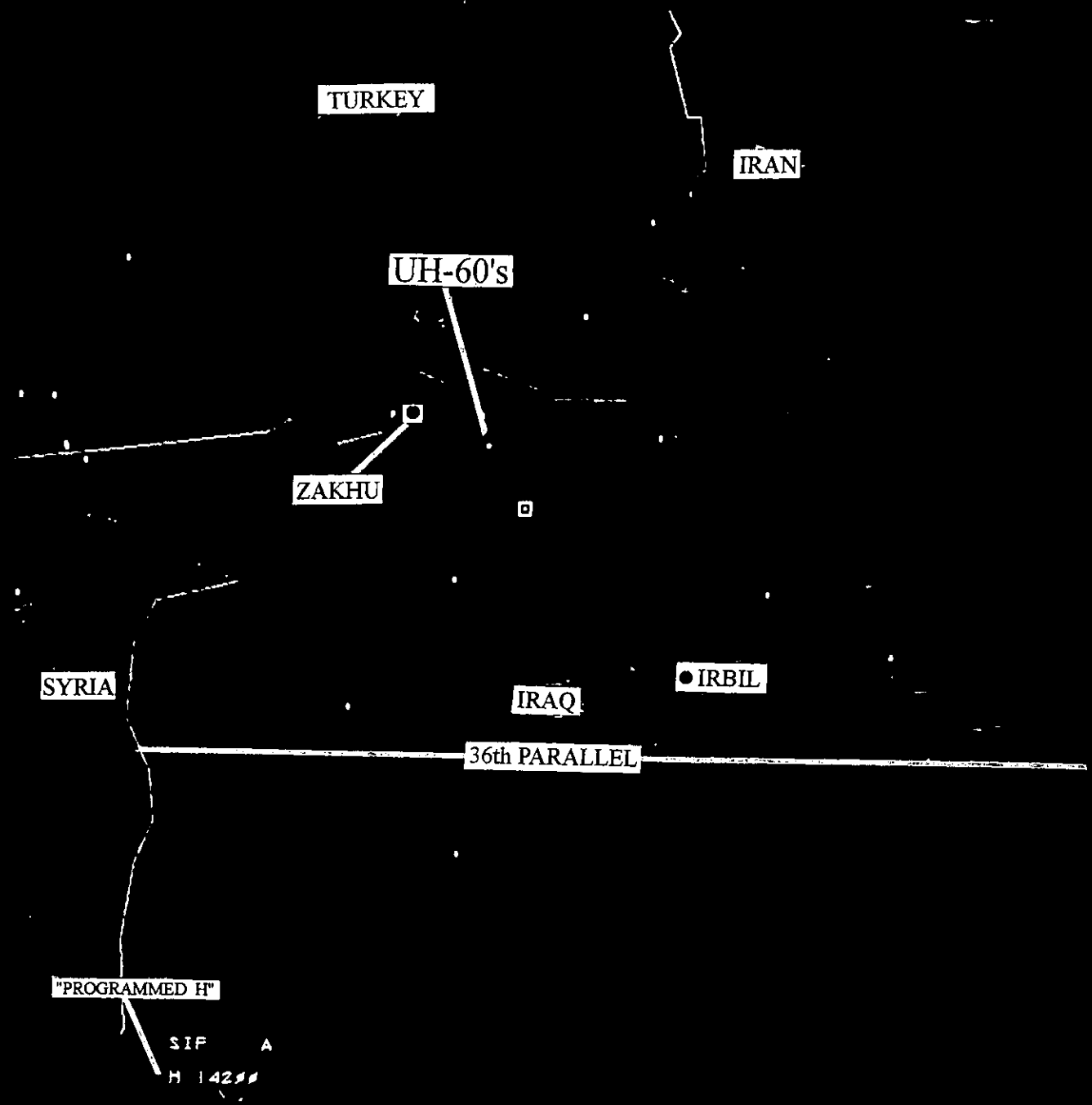


TST
 BUSY
 #7#731
 T(CHAP(SIP)) --- .OFF

LSF

Z4c5 TIME 0707:31Z

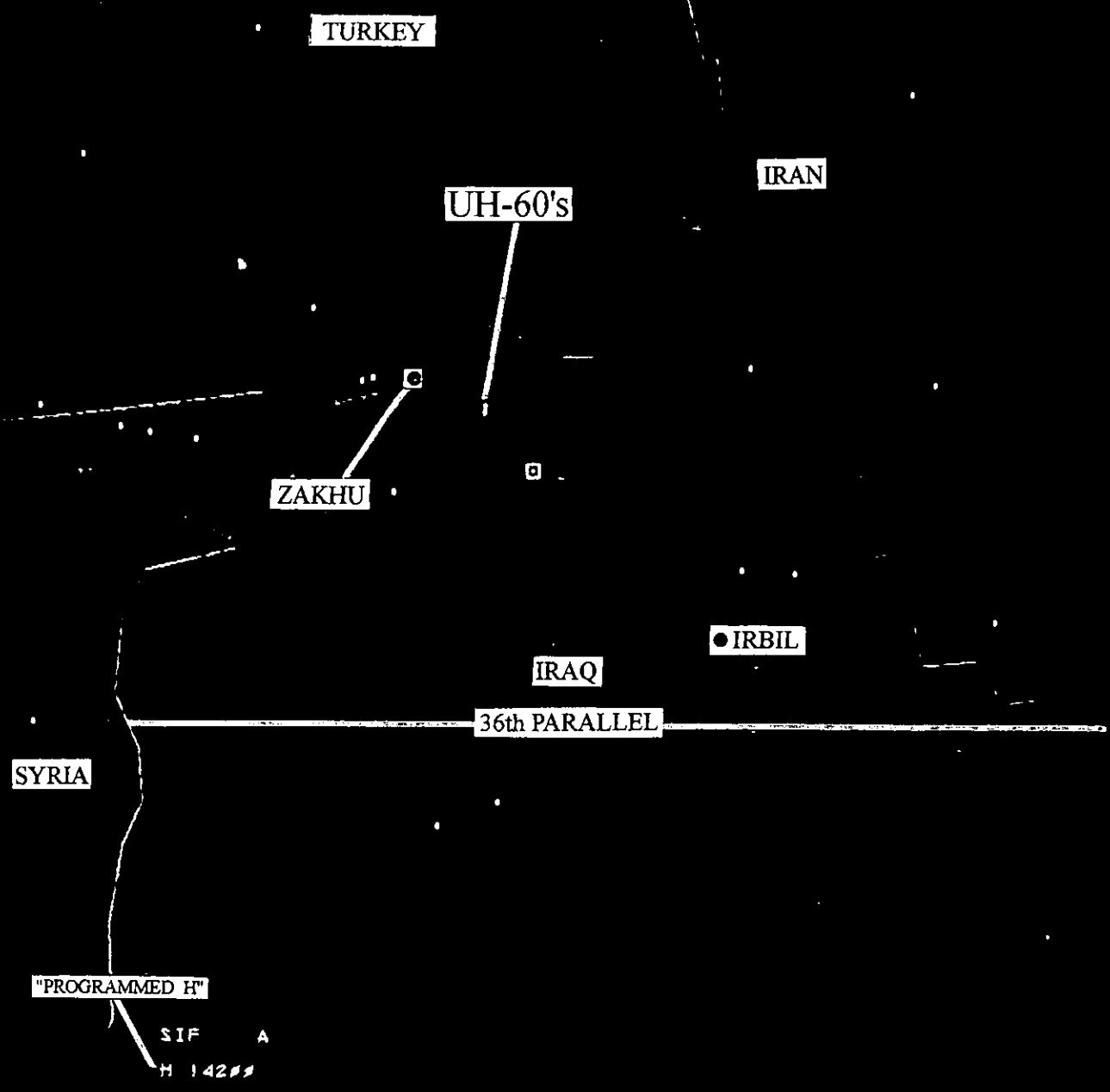
11 4



TST
BUSY
#77777
T (CHAR (SIP)) - - - .OPP)

LSF

Z4c4 TIME 0707:00Z

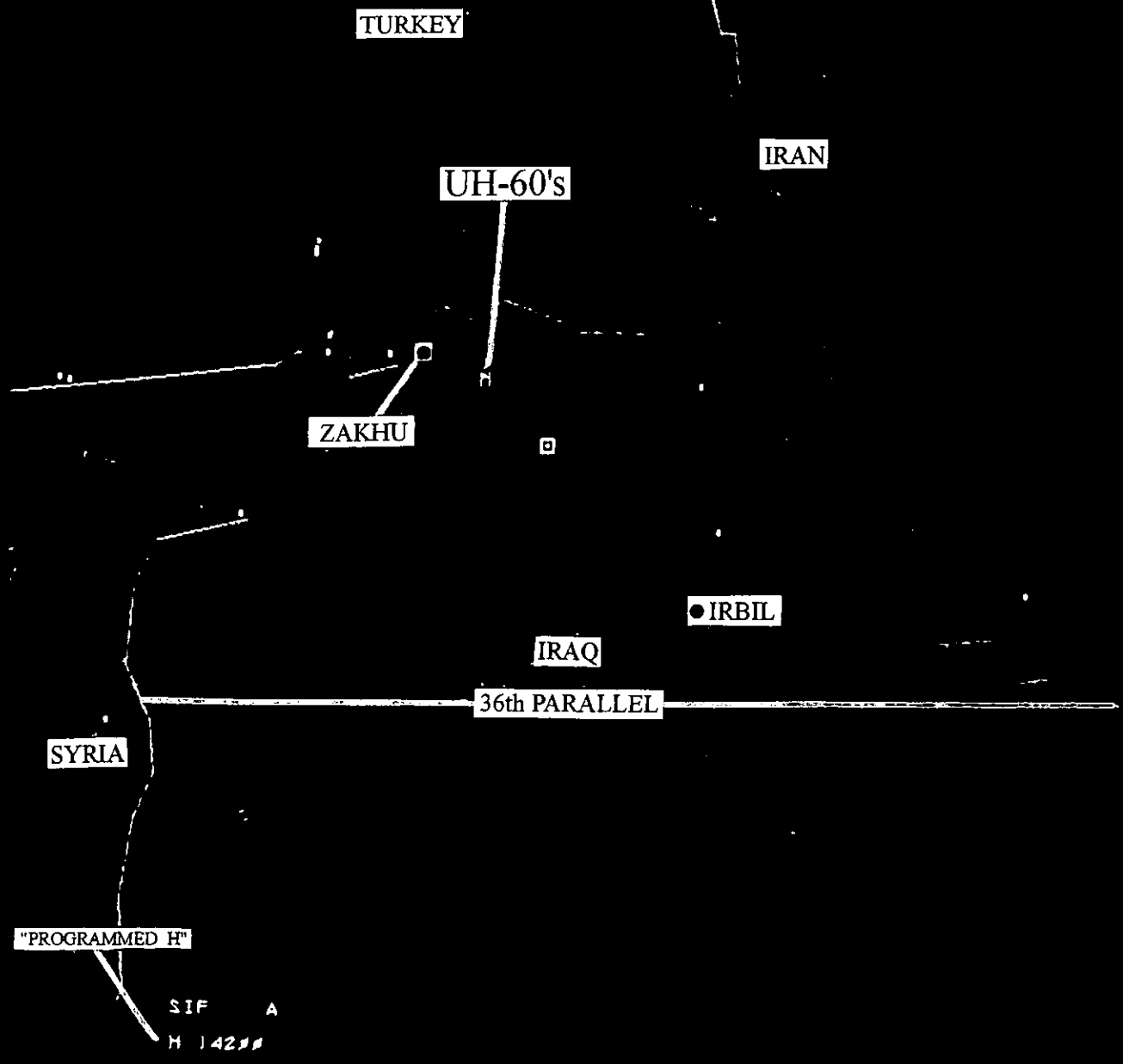


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BUSY
#7#6#1
7(CHAR(\$IP))---DPP)

LSF

Z4c3 TIME 0706:01Z

18

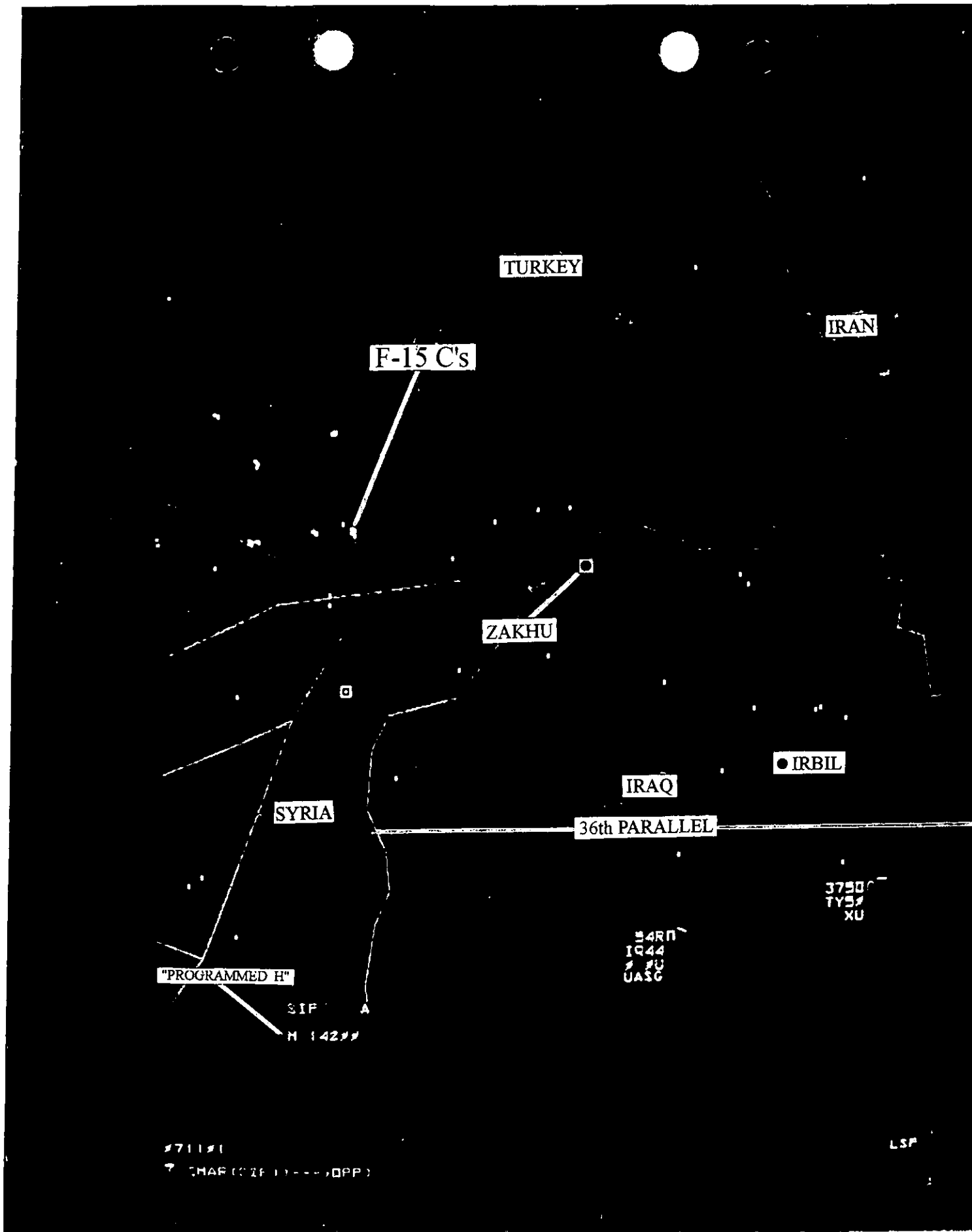


TST
 BUSY
 #7#4#)
 T(CHAP(SIP))---.OPP)

LSF

Z4c2 TIME 0704:01Z

11



Z4c9 TIME 0711:01Z

TURKEY

IRAN

F-15 C's

UH-60's

ZAKHU

● IRBIL

SYRIA

IRAQ

36th PARALLEL

"PROGRAMMED H"

37500
TYSJ
XU

SIRI
1044
JU
U43G

SIF A
M 14277

271238

7 CHAR (OIP) (OPP)

LSP

Z4c8 TIME 0710:38Z

TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

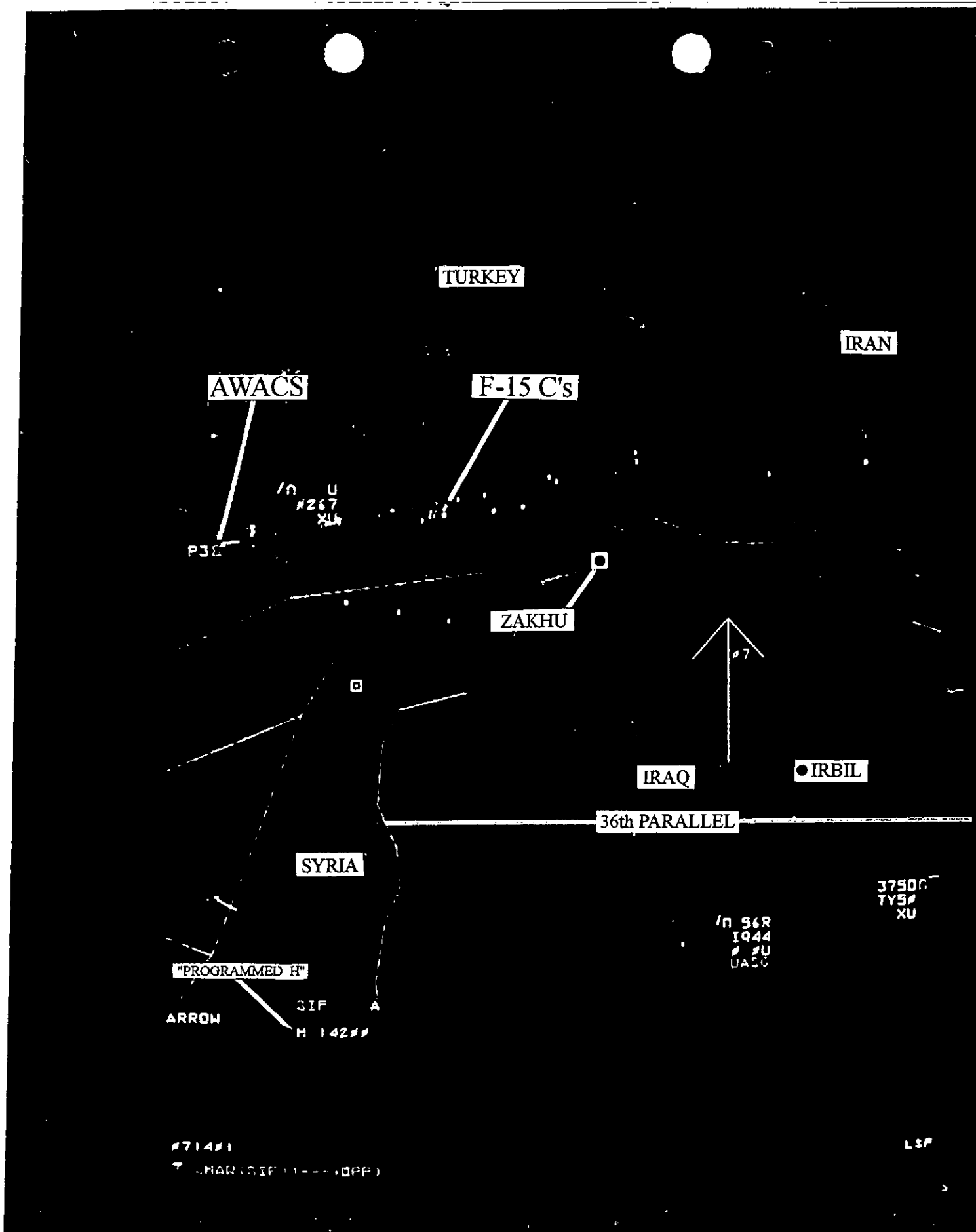
Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4c

Z-4h Senior Director's Console, 0727 thru 0730Z

Z-4d



Z4d1-2 - Photos of replay of the SD's scope at 0714:01Z and 0715:00Z showing no "H" or IFF/radar being displayed on the Black Hawks when they faded from AWACS coverage. Also, photo 1 shows a computer-generated ARROW being received at the SD's console from console 07, the ASO. Photo 2 shows that the arrow is no longer displayed...

TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4c

Z-4h Senior Director's Console, 0727 thru 0730Z

Z-4d

Z-4e

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E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

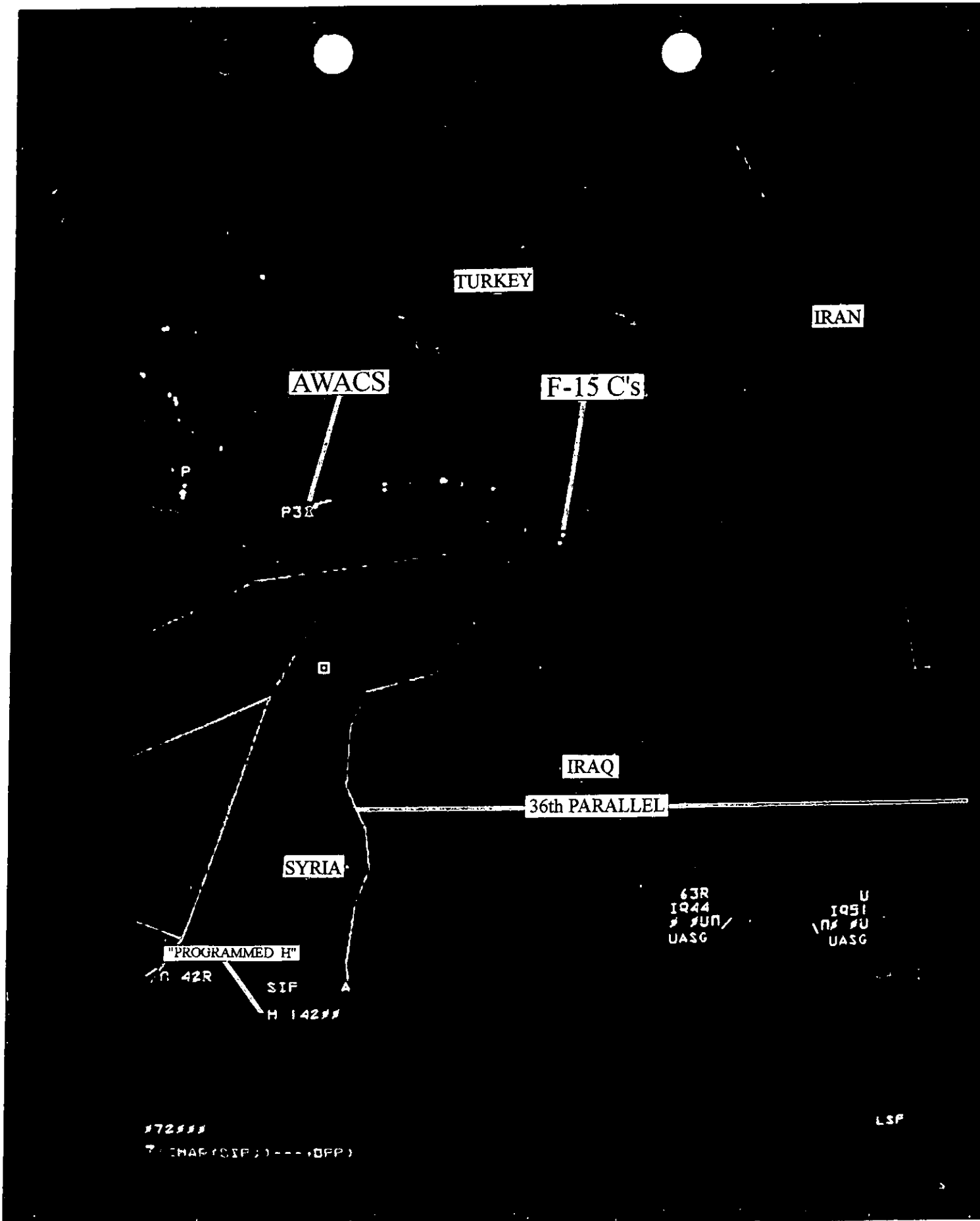
Z-4c

Z-4h Senior Director's Console, 0727 thru 0730Z

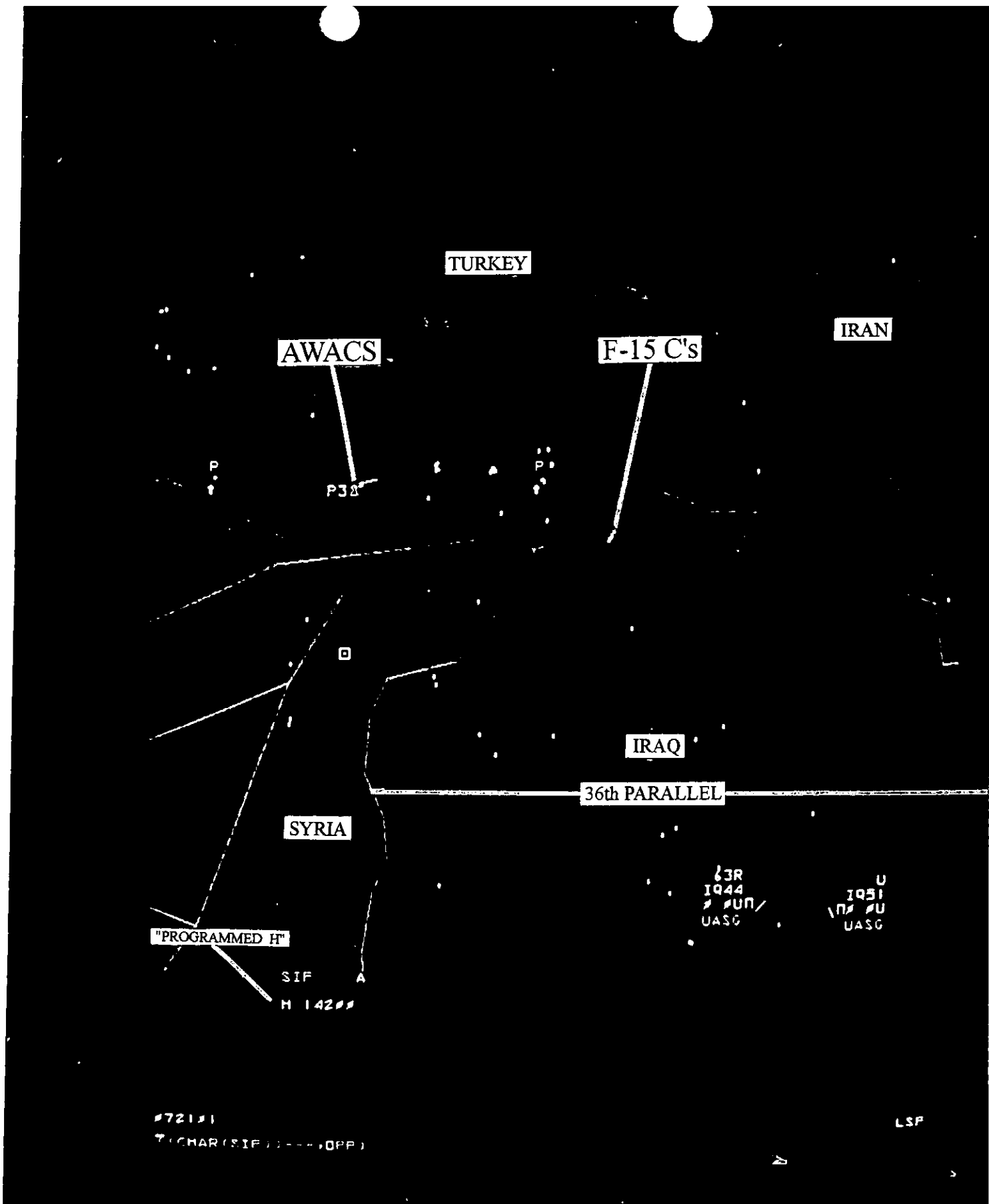
Z-4d

Z-4e

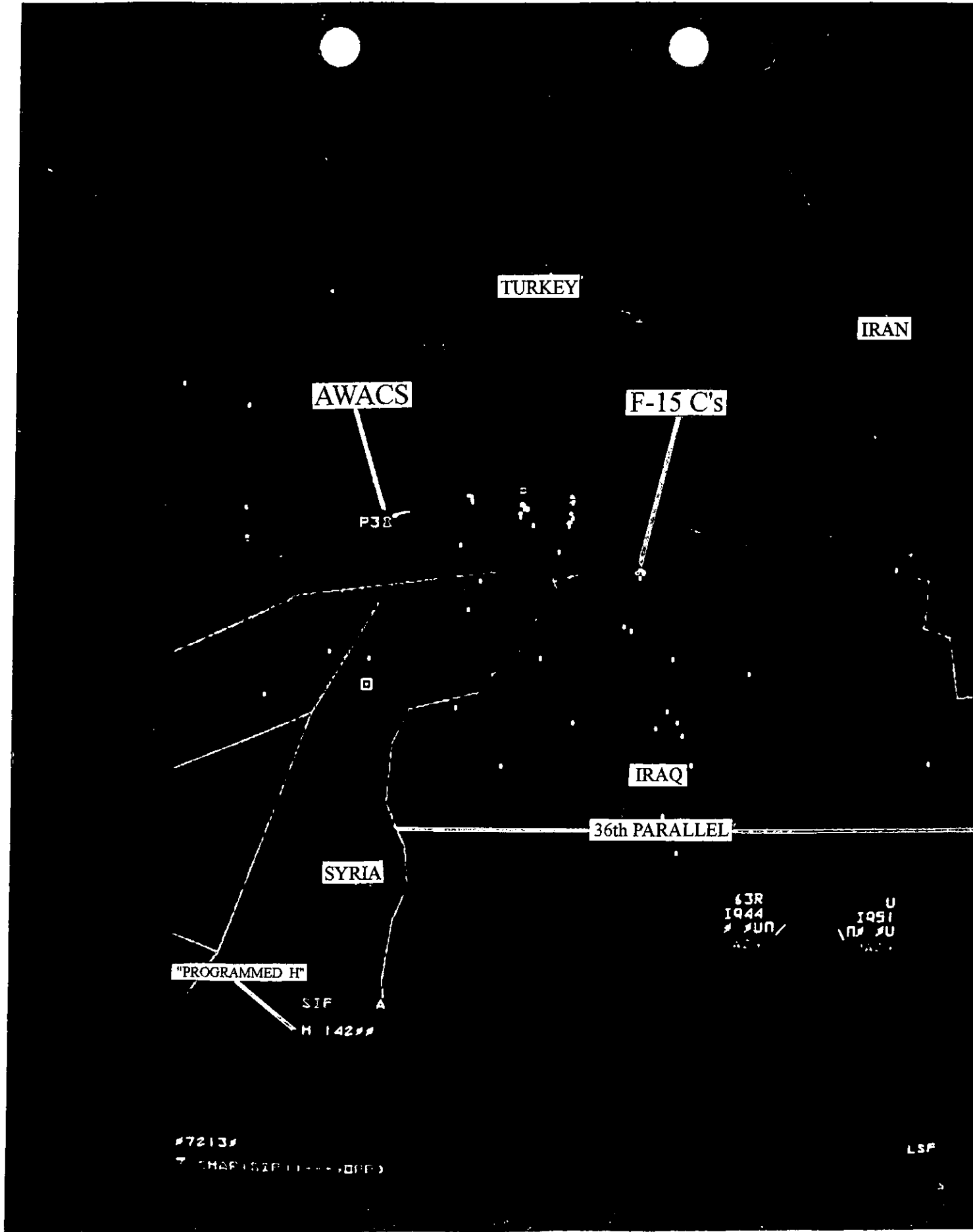
Z-4f



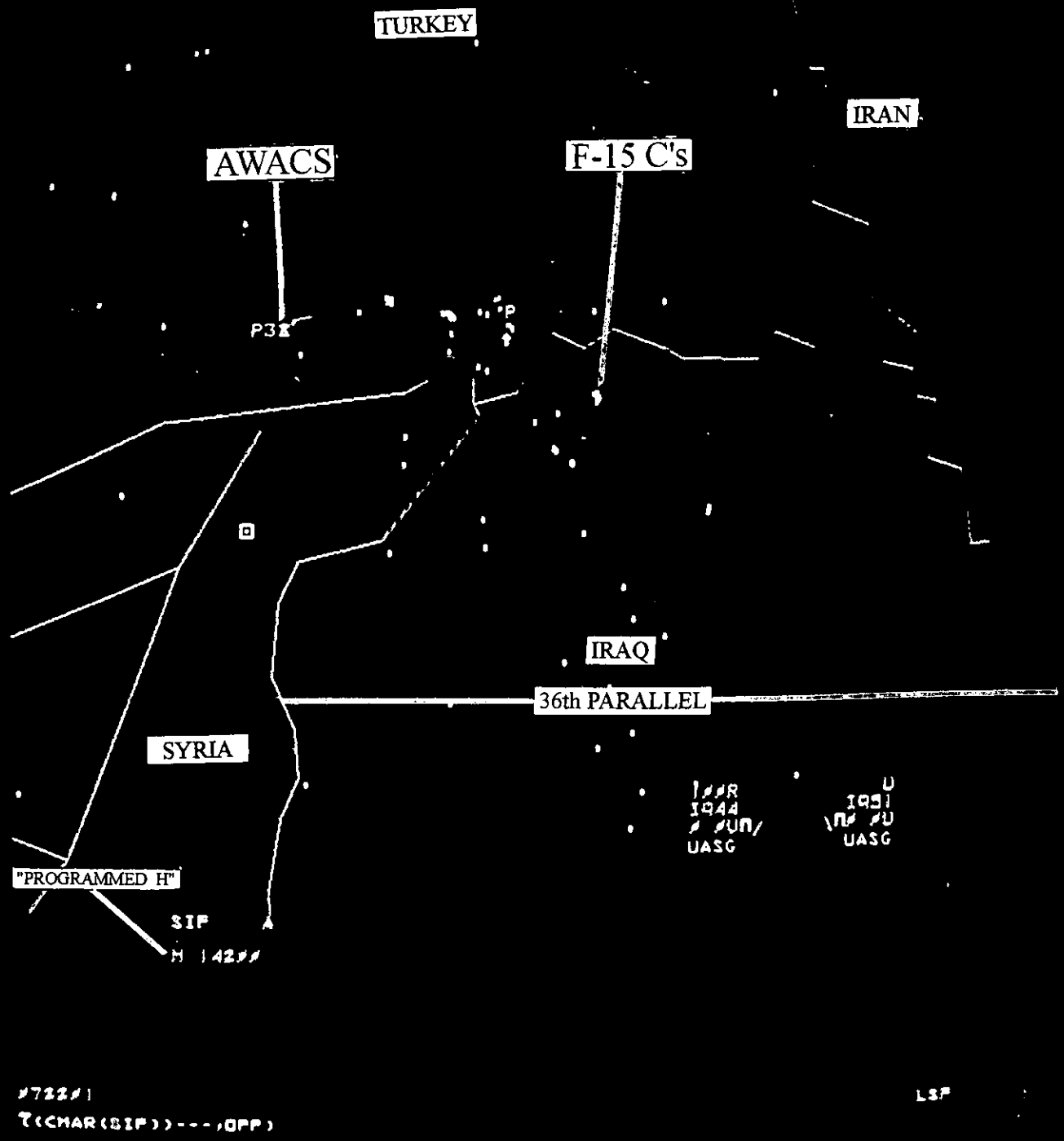
Z4e - Photo of replay of the SD's scope at 0720:00Z showing that an "H" character was still programmed. Photo shows the F-15s entering the TAOR at Gate 1.



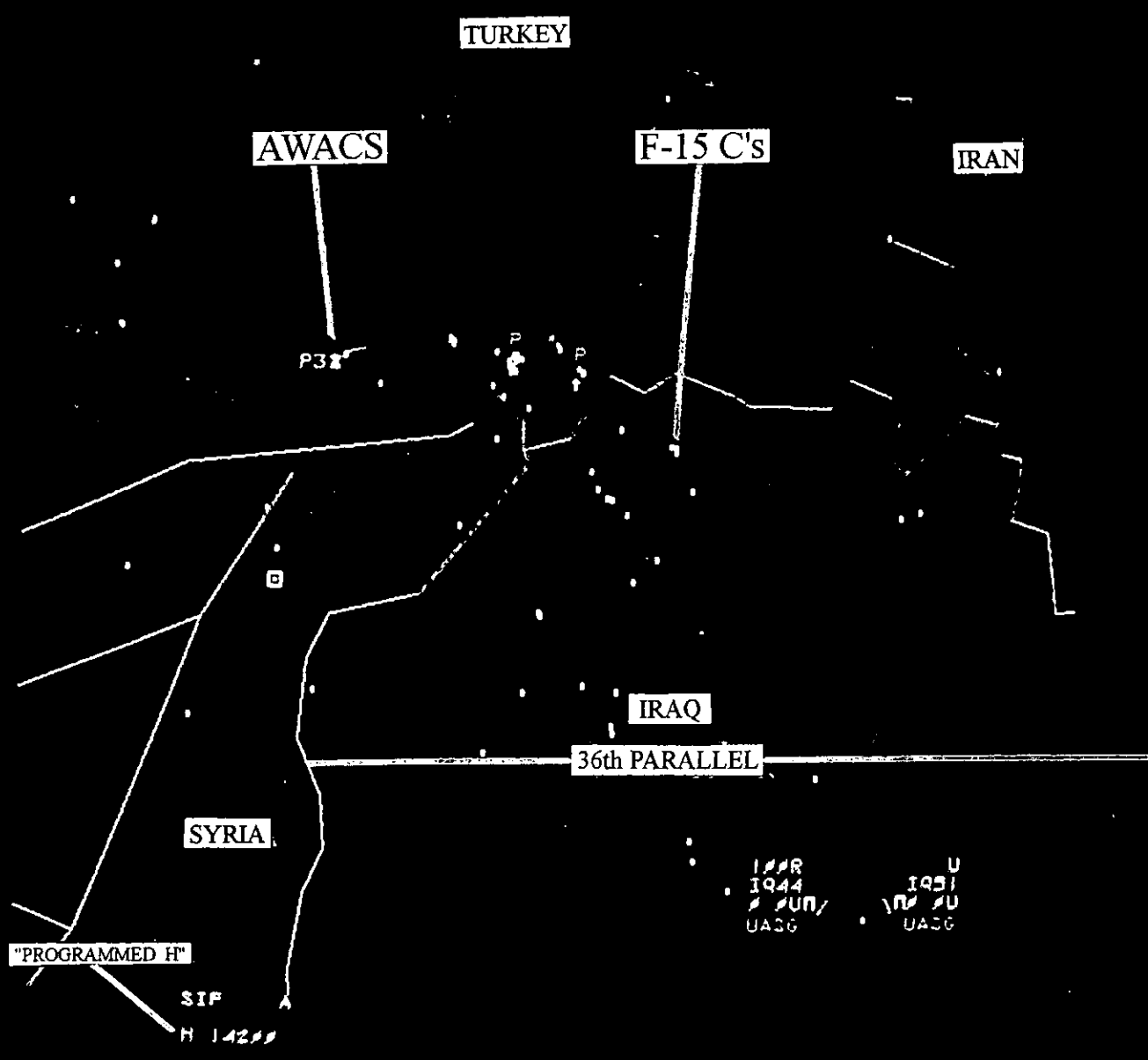
Z4f1-4 - Photos of replay of the SD's scope from 0721:01Z through 0722:31Z showing that an "H" character was still programmed. Photos show the F-15s continuing on a southeasterly heading during their interception of the Black Hawks, and no IFF/radar from the Black Hawks on AWACS' scopes.



Z4f2 TIME 0721:30Z



Z4f3 TIME 0722:01Z



#7223)
 T(CHAR(SIP))---,OFF)

LSP

Z4f4 TIME 0722:31Z

TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4c

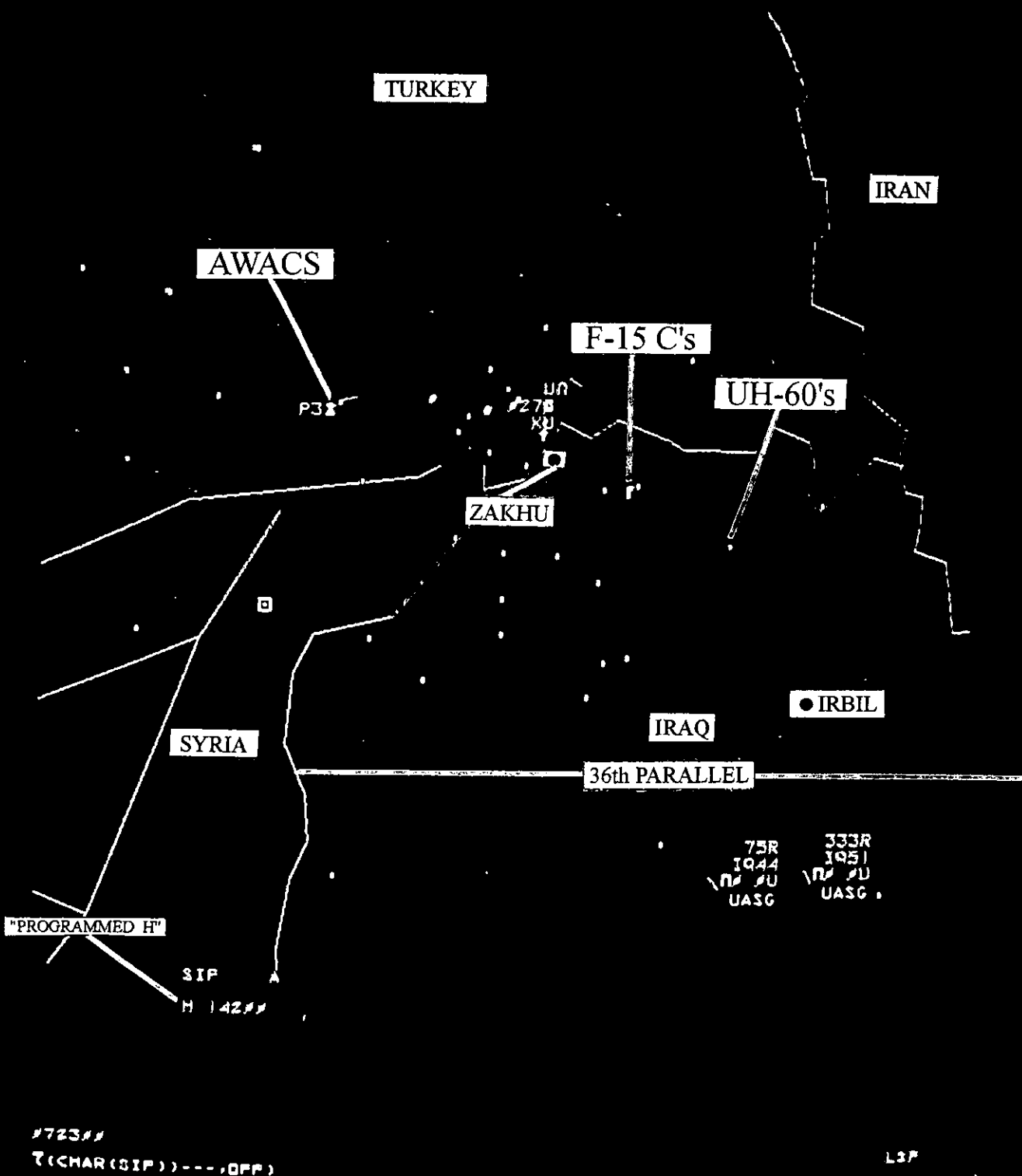
Z-4h Senior Director's Console, 0727 thru 0730Z

Z-4d

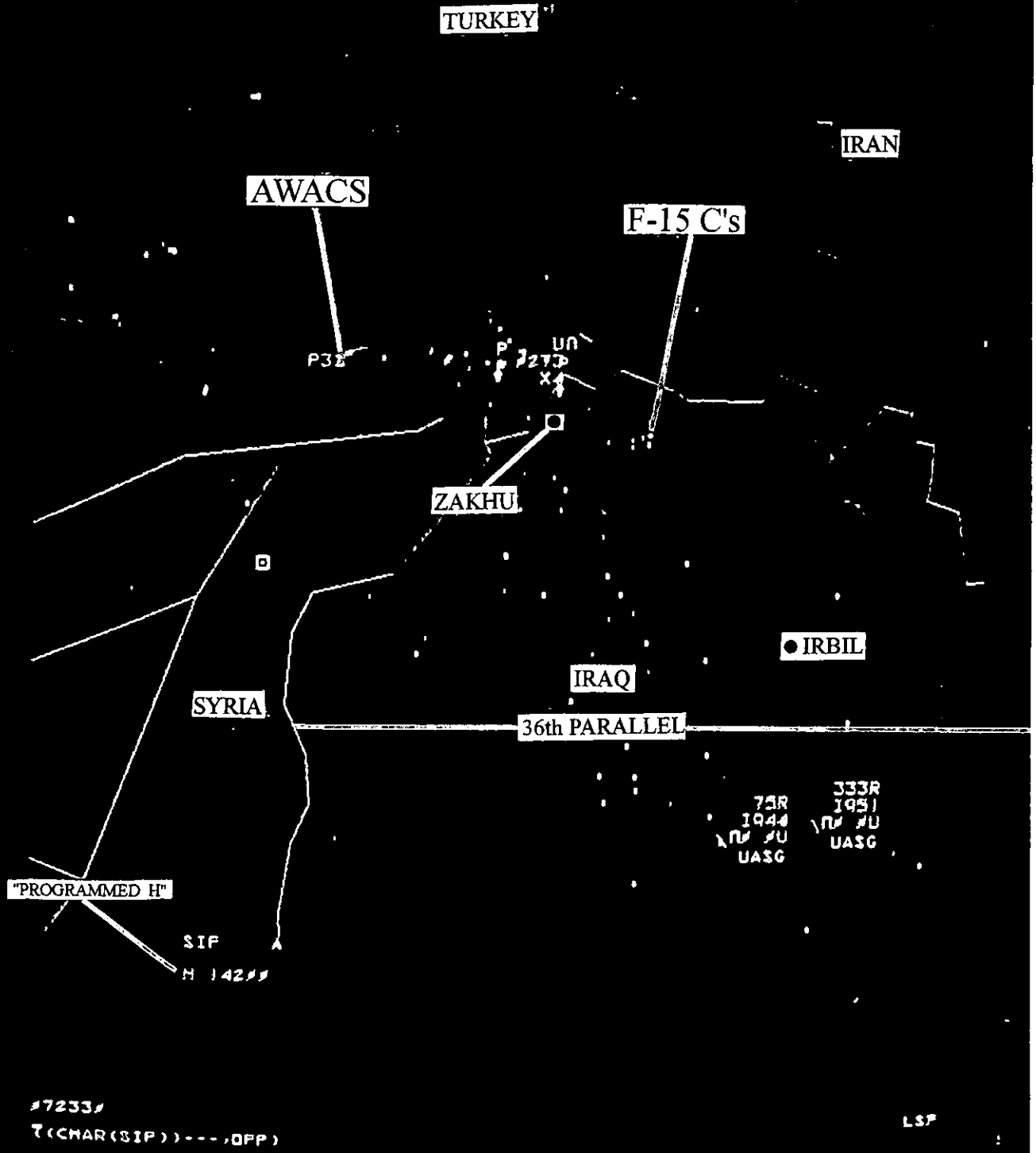
Z-4e

Z-4f

Z-4g

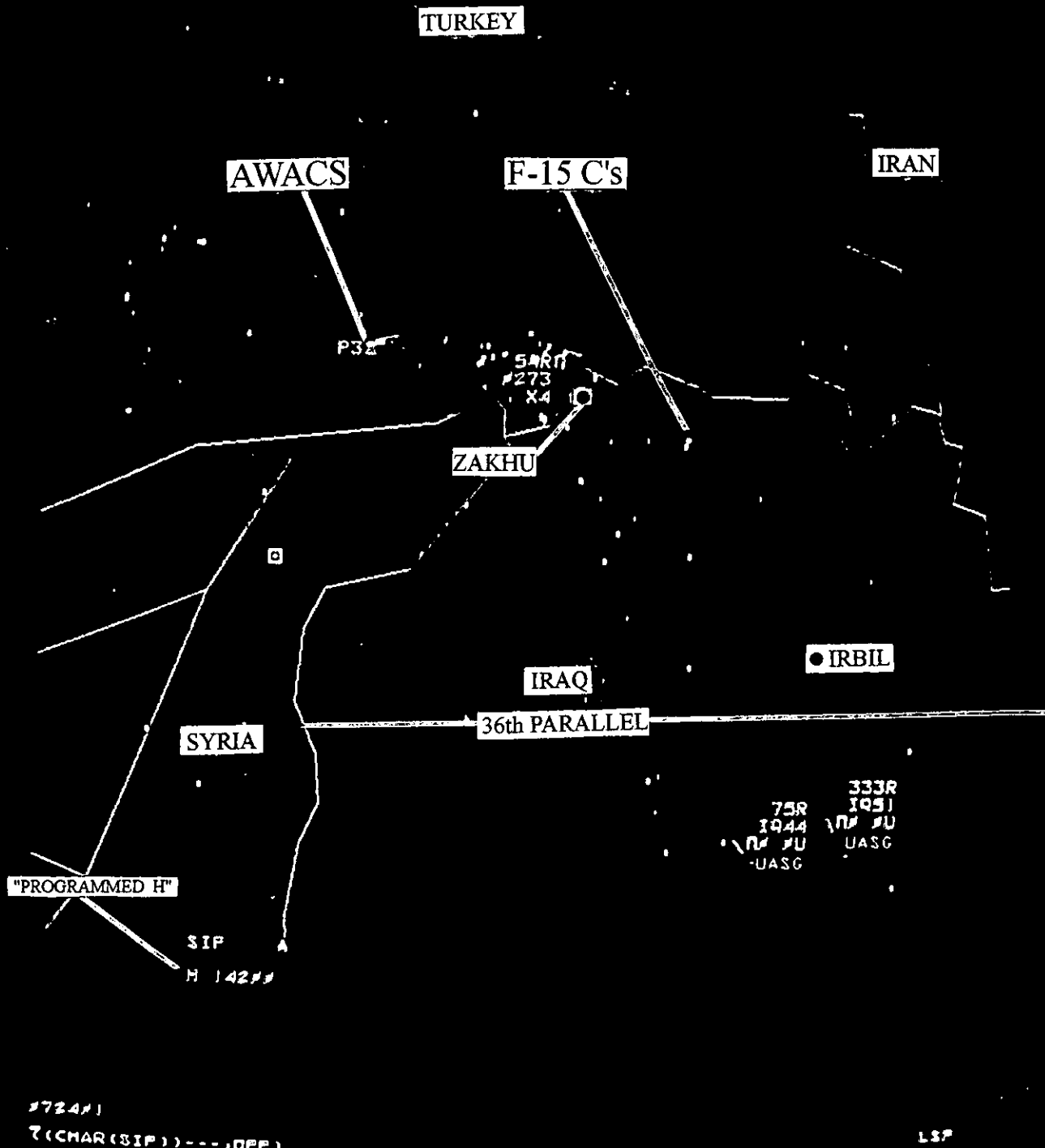


Z4g1-6 - Photos of replay of the SD's scope from 0723:00Z through 0725:31Z showing that an "H" character was still programmed. The photos show the F-15s continuing their intercept and the reappearance of the Black Hawk's IFF and associated "H".

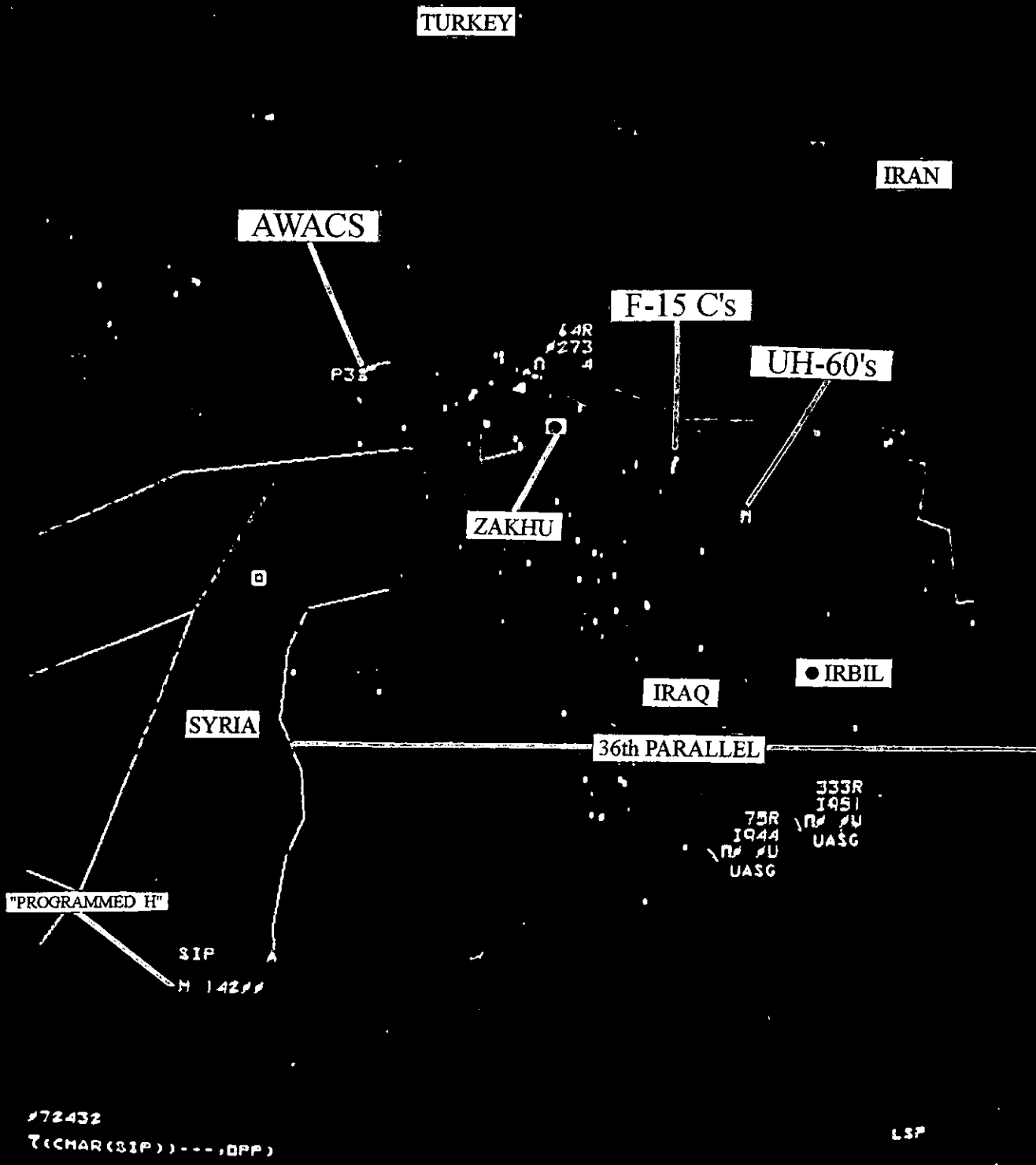


Z4g2 TIME 0723:30Z

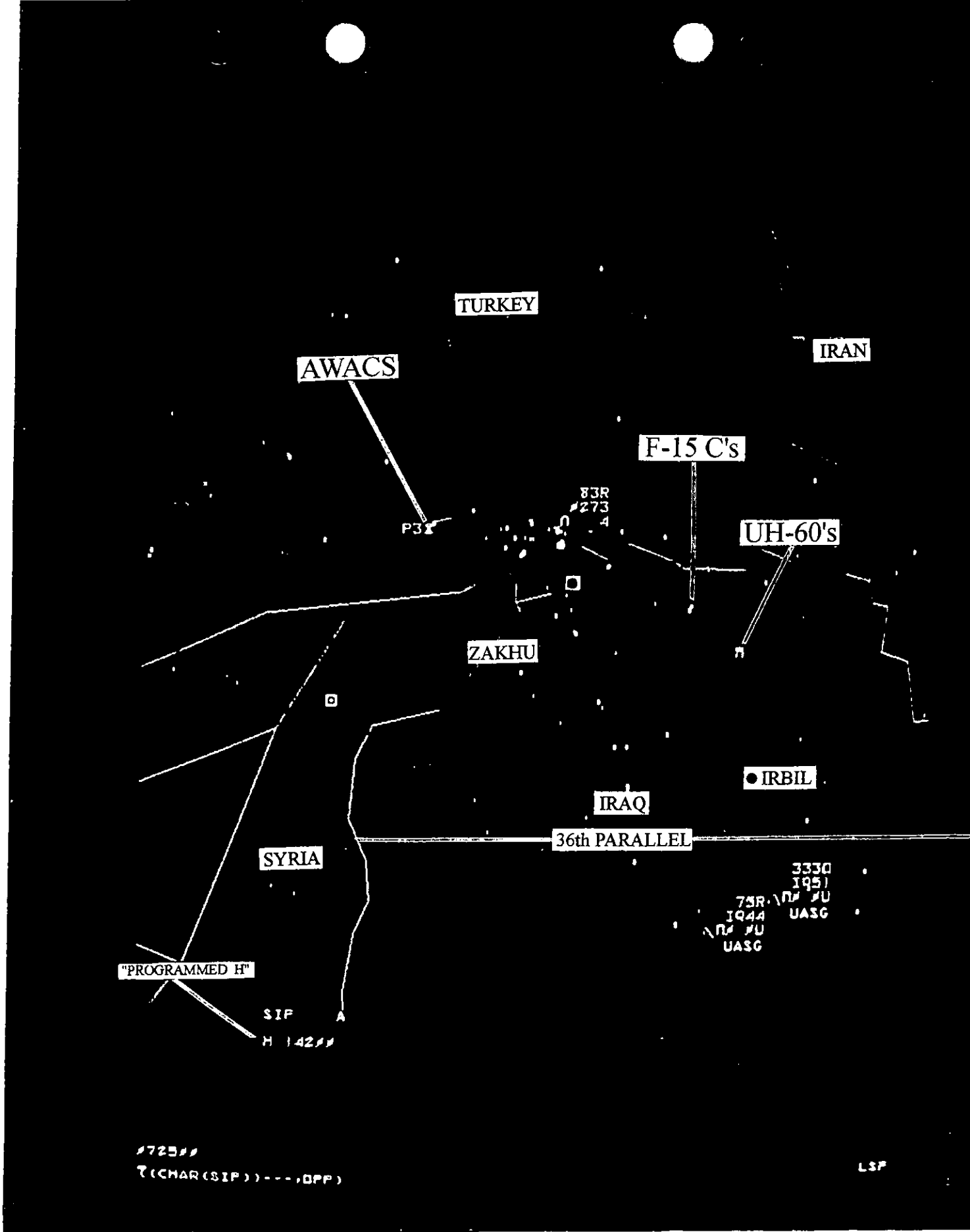
12



Z4g3 TIME 0724:01Z

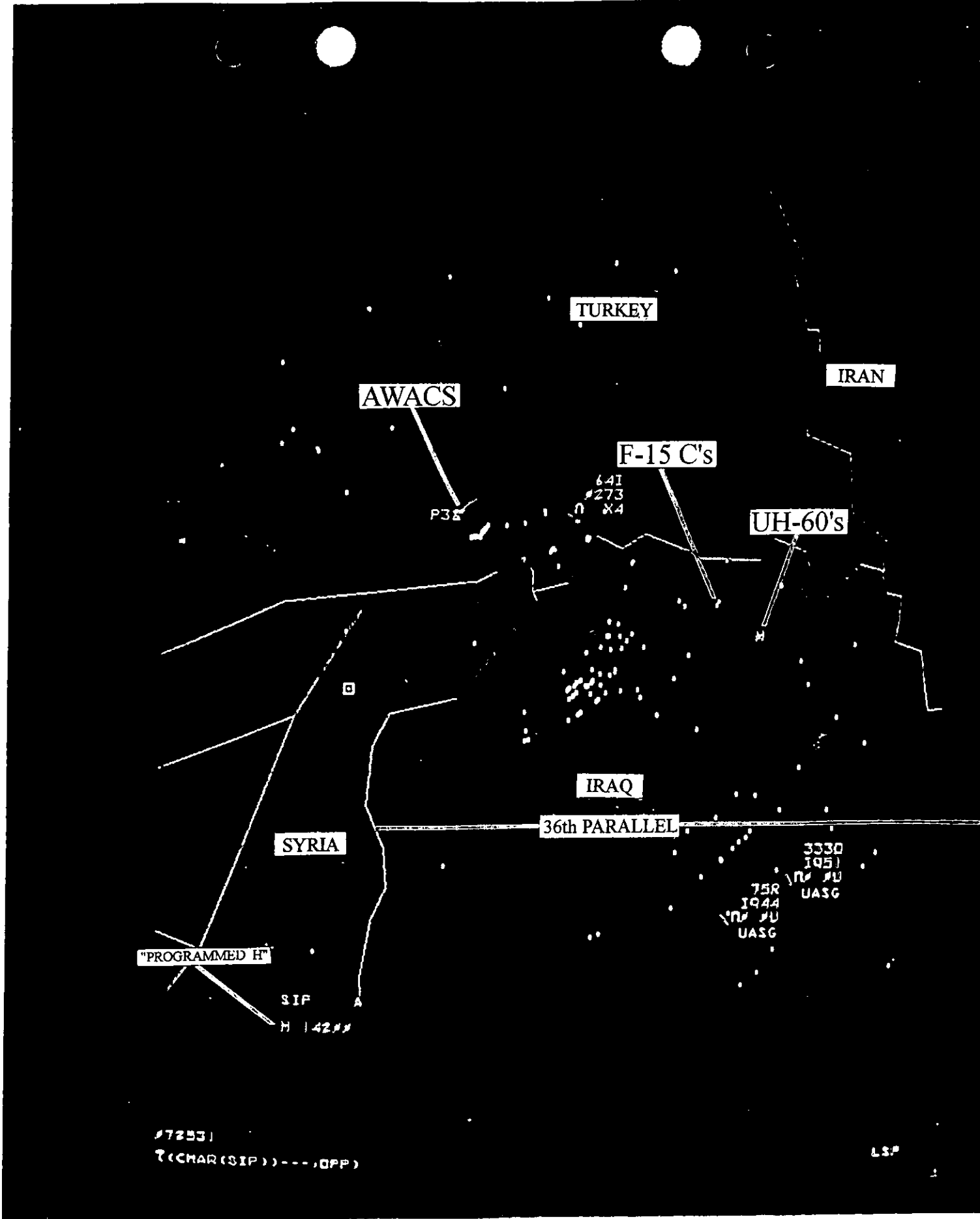


Z4g4 TIME 0724:32Z



Z4g5 TIME 0725:00Z

12 114



Z4g6 TIME 0725:31Z

1.

TAB Z-4

E-3B AWACS CONSOLES

Z-4a Senior Director's Console, 0616Z

(See Classified Addendum)

Z-4b Senior Director's Console, 0620Z and 0624Z

(See Classified Addendum)

Z-4c Senior Director's Console, 0655 thru 0711Z

Z-4a

Z-4d Senior Director's Console, 0714 and 0715Z

Z-4e Senior Director's Console, 0720Z

Z-4b

Z-4f Senior Director's Console, 0721 thru 0722:31Z

Z-4g Senior Director's Console, 0723 thru 0725:31Z

Z-4c

Z-4h Senior Director's Console, 0727 thru 0730Z

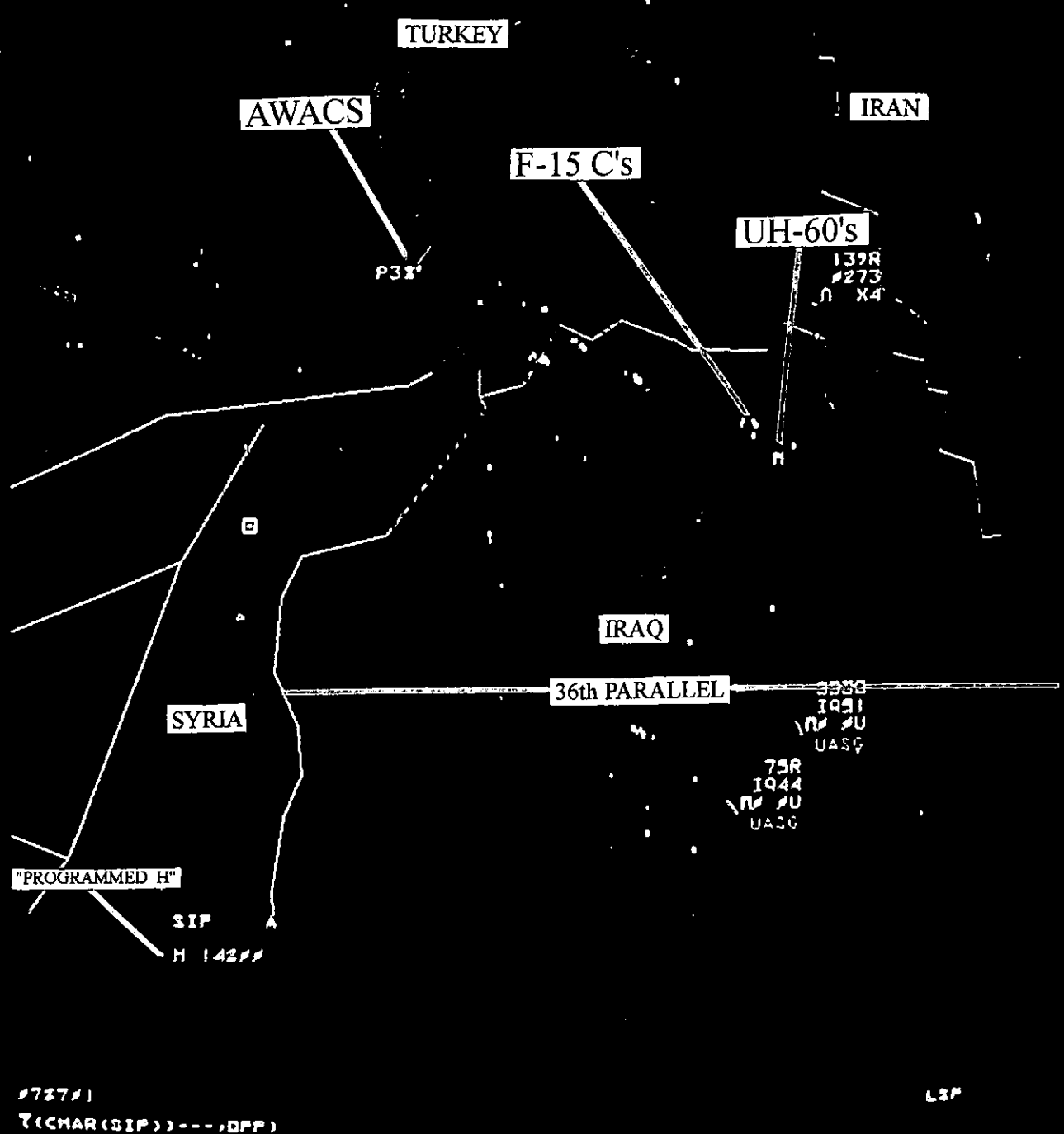
Z-4d

Z-4e

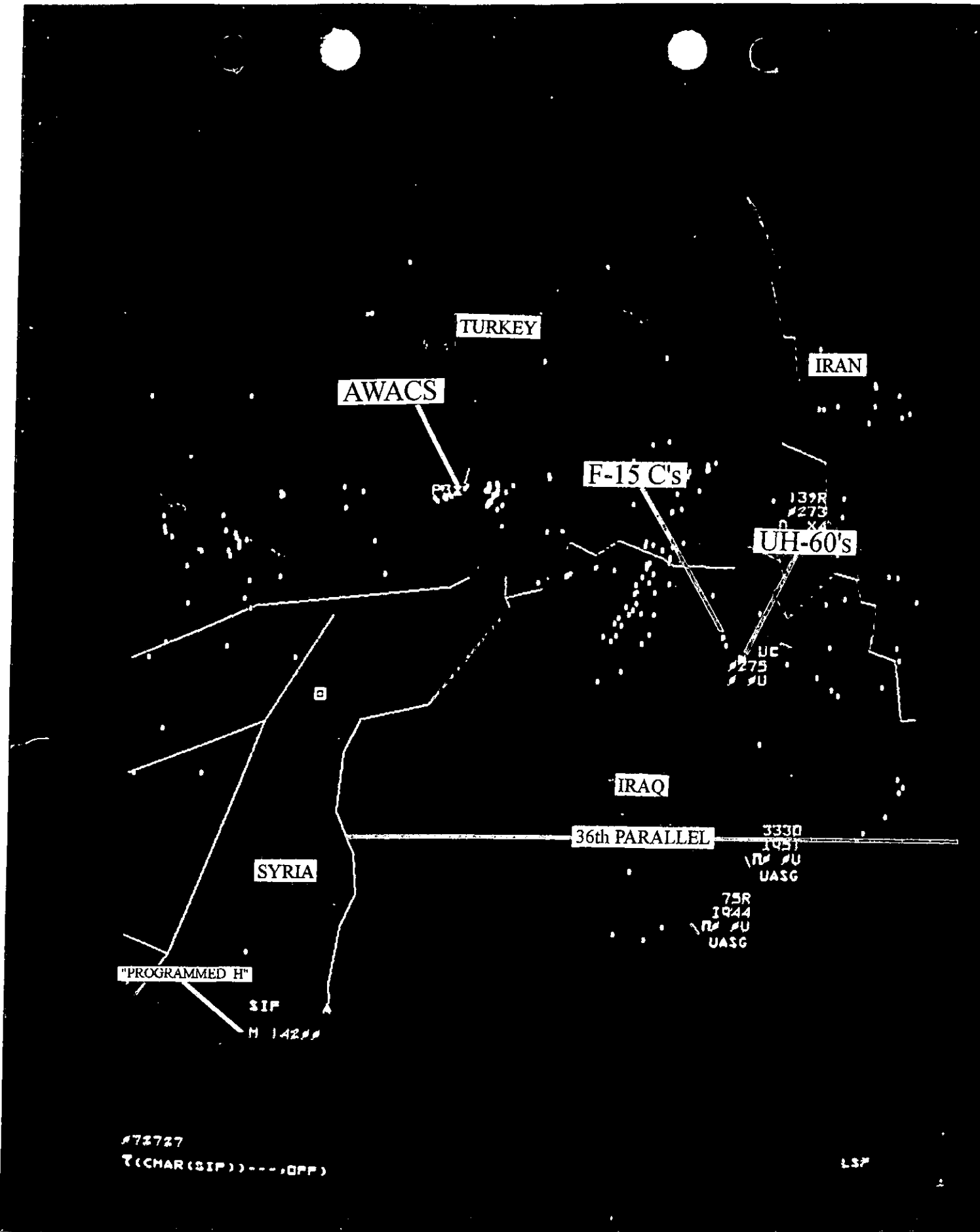
Z-4f

Z-4g

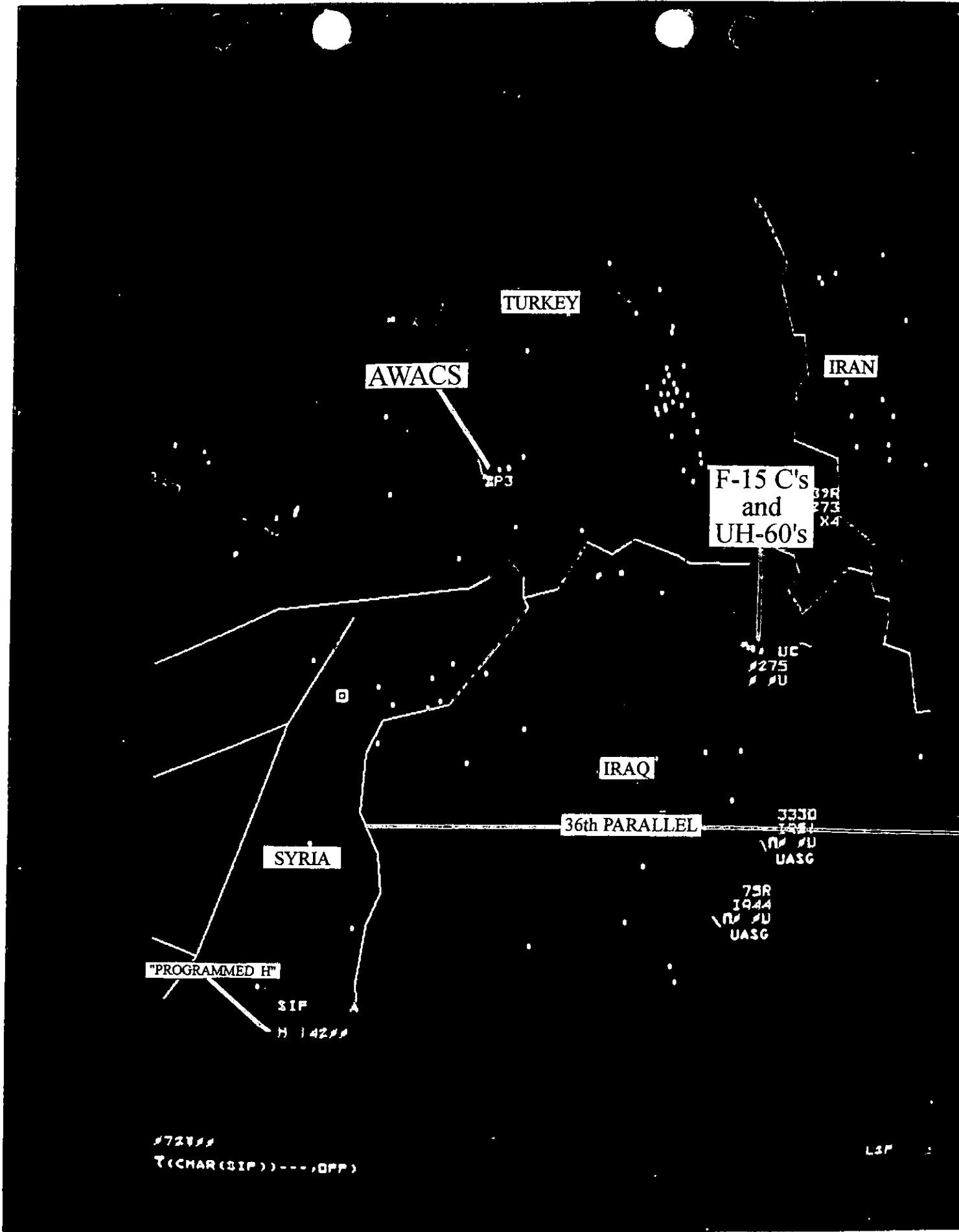
Z-4h



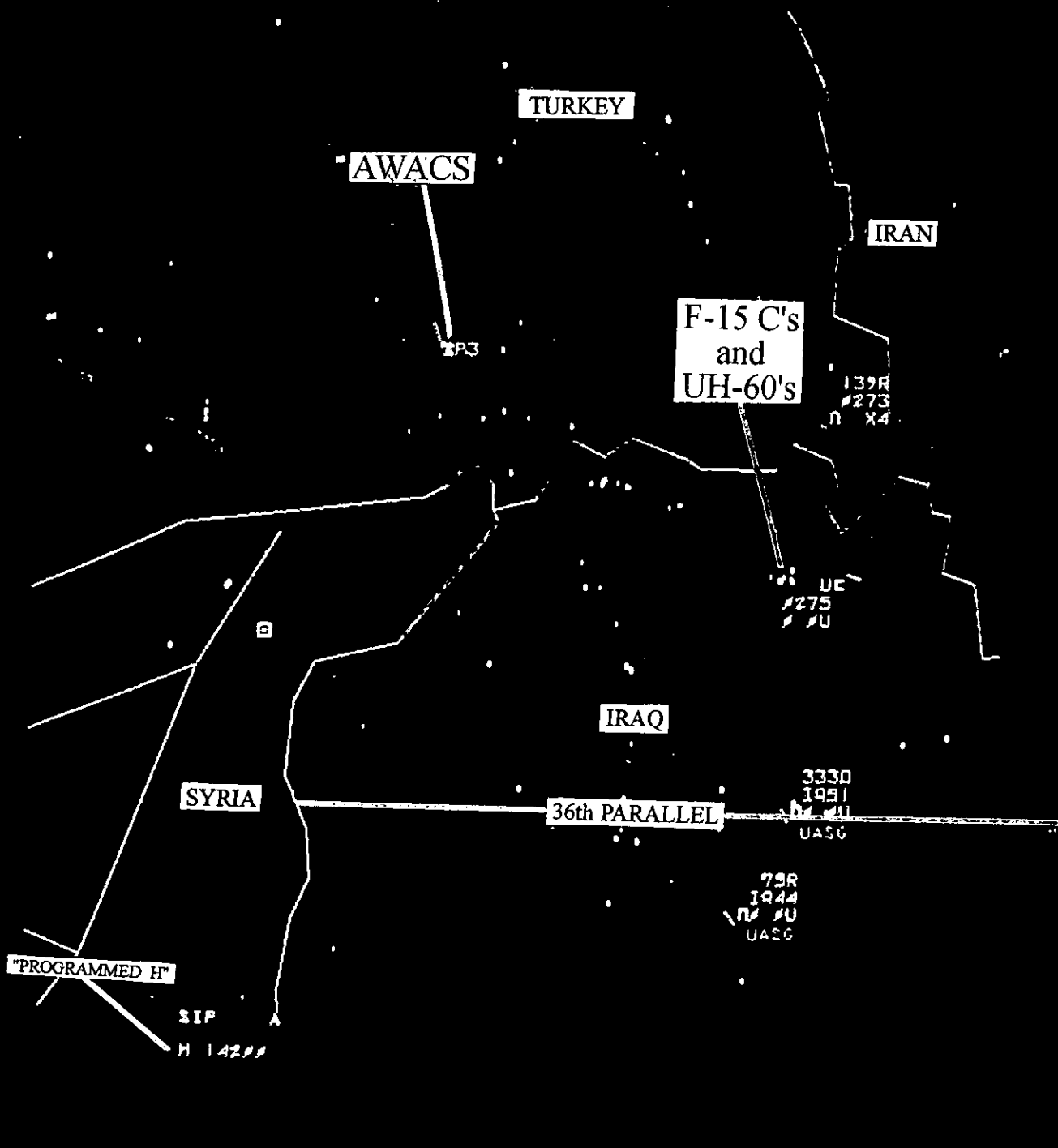
Z4h1-7 - Photos of replay of the SD's scope from 0727:01Z through 0730:00Z showing that an "H" character was still programmed. The photos show the F-15s continuing their intercept of the Black Hawks, an AWACS track symbology has been initiated in the vicinity of the "H", the disappearance of the Black Hawk's IFF and associated "H", and finally two track information displays on the AWACS symbology:



Z4h2 TIME 0727:27Z



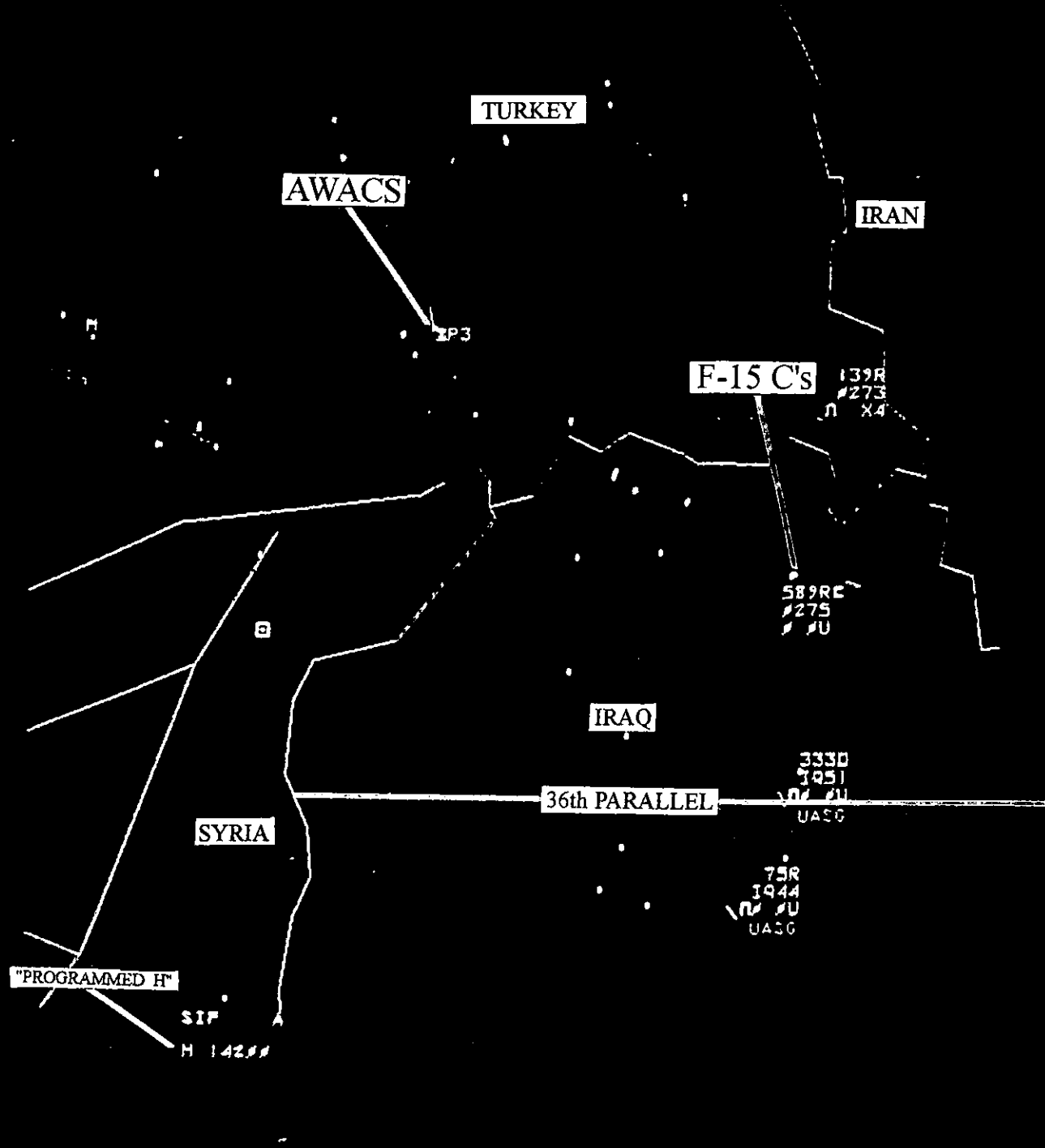
Z4h3 TIME 0728:00Z



172231
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L37

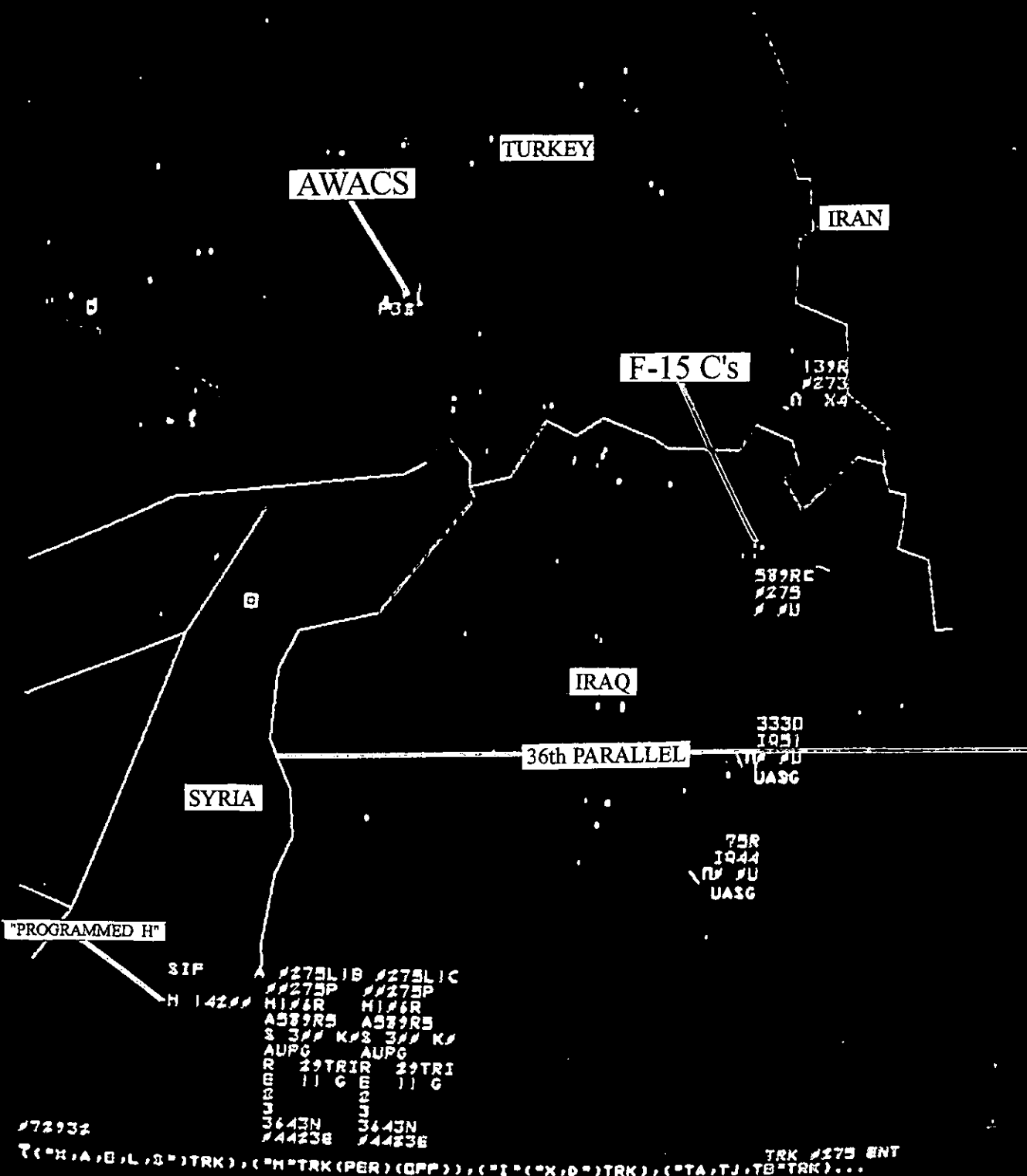
Z4h4 TIME 0728:30Z



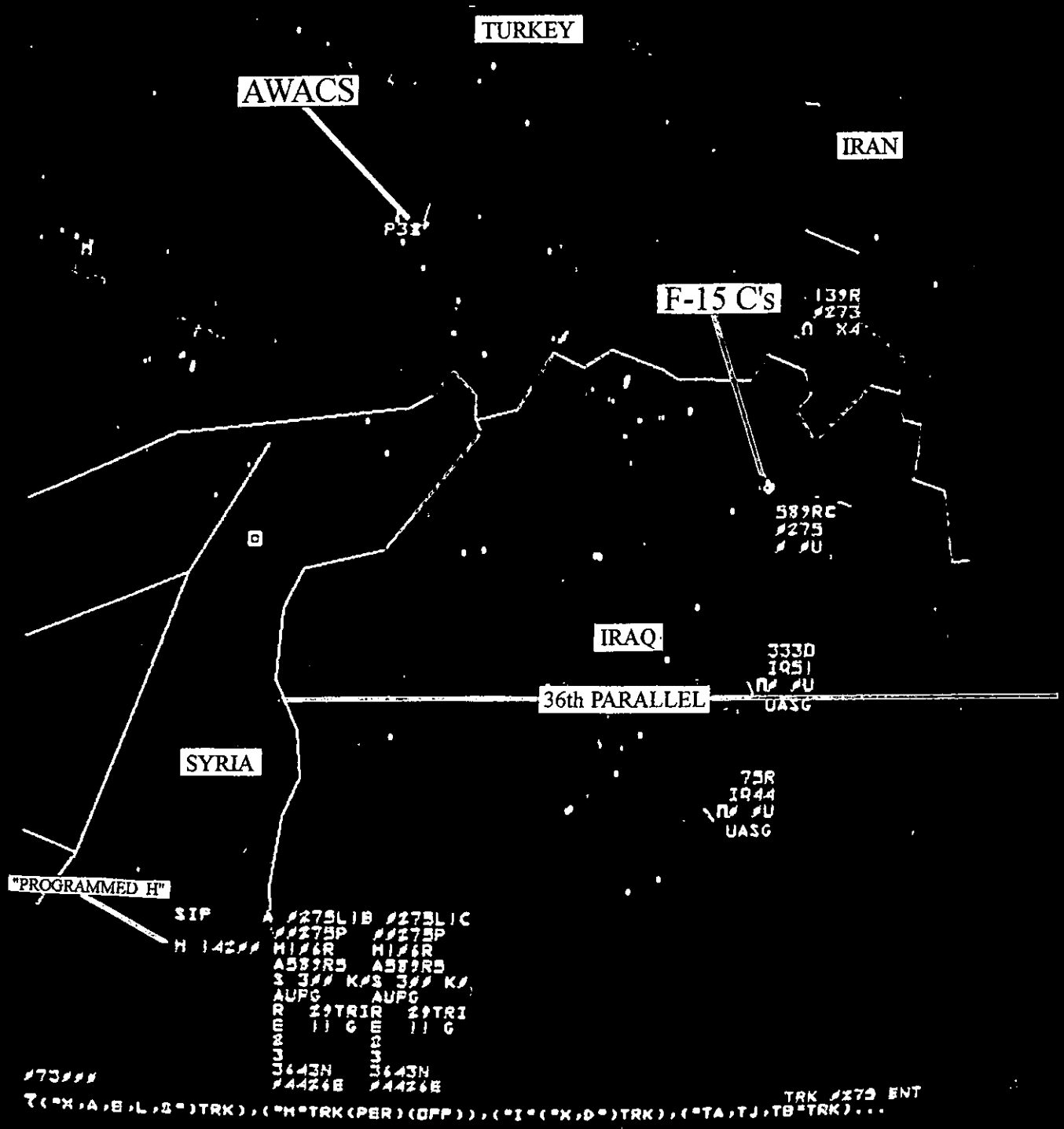
072901
 T(CHAR(SIP))---.OFF)

LSP

Z4h5 TIME 0729:01Z



Z4h6 TIME 0729:32Z



Z4h7 TIME 0730:00Z