

NBC 1 (OBSERVER'S REPORT)

LINE	NUCLEAR	CHEMICAL	BIOLOGICAL
B	NB062634	LB200300	LB206300
C	90DGG	90DGG	
D	201405Z	201405Z	200410Z
E		201412Z	200414Z
F	LB206300 Est	LB206300 Act	LB 206300
G	Aircraft	Bombs	Aerial Spray
H	Surface	Nerve, V/Airburst/P	Unknown
J	60 Sec		
L	15 Deg		
M			

NOTE: Line items B, D, H, and either C or F should always be reported. Other line items may be used if the information is known.

NBC 2 REPORT (EVALUATED DATA)

LINE	NUCLEAR	CHEMICAL
A	A024	C002
D	201405Z	200945Z
F	LB187486 Act	LB126456 Act
G	Aircraft	Bombs
H	Surface	Nerve, V/Airburst/P
N	50	
Y		0270 Deg. 015 kmph
ZA		518640
ZB		

NOTES: 1. This report is normally based on two or more NBC 1 reports. It includes an attack location and, in the case of a nuclear detonation, an evaluated yield.
2. Refer to the chemical downwind message to determine cloud cover, significant weather phenomena, and air stability.

4

NBC 3 REPORT (IMMEDIATE WARNING OF EXPECTED CONTAMINATION)

LINE	NUCLEAR	CHEMICAL	BIOLOGICAL
A	B024	C002	B001
D	2014045Z	201415Z	200430Z
F	LB187486 Est	LB560750 Act	LB200300 to LB208304
H		Nerve, V/Airburst/P	Unknown
N	50		
PA		LB556751 LB559754 LB632774 LB610794 LB558747	LB216298 LB203290 LB700000 LB700609 LB213313
PB		In attack area 2-4 days In hazard area 1-2 days	
Y	02720312 Deg.	0270 Deg. 015 kmph	0270 Deg. 015 kmph
Z	01902505		
ZA		518640	6158-0
ZI			

NOTES: 1. If the effective wind speed is less than 8 kmph, line Z of the NBC report (nuclear) consists of three digits for the radius of Zone 1.
2. If the wind speed is less than 10 kmph line PA of the NBC 3 report (chemical) is 010, which is the radius of the hazard area.

NBC 4 REPORT (RECON, MONITORING, AND SURVEY RESULTS)

LINE	NUCLEAR	CHEMICAL	BIOLOGICAL
H		Nerve, V	Unk. susp bio
Q	LB123987	LB200300, Liquid	LB200300, Liq.
R	35		
S	201535Z	170610Z	200530Z
ZB			

NOTES: 1. Line items H, Q, R, and S may be repeated as often as necessary.
2. Measure radiation dose rates in the open, with the instrument 1 meter above the ground.
3. In line R, descriptive words such as "initial," "peak," "increasing," "decreasing," "special," "series," "verification," or "summary" may be added.
4. If readings are taken inside a vehicle or shelter, also give the correlation factor.

5

NBC 5 REPORT (AREAS OF ACTUAL CONTAMINATION)

LINE	NUCLEAR	CHEMICAL
A	A0012	C005
D		200700Z
H		Nerve, V/Airburst/P
S		201005Z
T	201505Z	201110Z
U		
V	ND651455 ND810510 ND821459 ND651455 ND604718 ND991686 ND114420 ND595007	
W		
X		ND206991 ND201576 ND200787 ND206991

NOTE: This report is best sent as an overlay if time and the tactical situation permit.

NBC 6 REPORT (DETAILED INFORMATION ON CHEMICAL OR BIOLOGICAL ATTACKS)

LINE	CHEMICAL OR BIOLOGICAL
A	B001
D	200945Z(May)
E	200950Z(May)
F	LB200300, Act
G	Artillery
H	Nerve, V/Airburst/P
I	20 rounds
K	Mostly small houses and barns, elevation 600 meters
Q	Liquid ground sample taken by detection team in attack area
S	201005Z (May)
T	201110Z(May)
X	As per overlay
Y	Downwind direction 0090 degrees. Wind speed over 010 kmph
ZB	This is the only chemical attack in our area to date.

NOTES: 1. This report is submitted only when requested.
2. This report is completed by battalion and higher NBC personnel. It is in narrative form, giving as much detailed information as possible for each line item.

6

Graphic Training Aid

GTA 03-06-008*

NBC Warning and Reporting System

DISTRIBUTION: US Army Training Support Centers (TSCs)

DISTRIBUTION RESTRICTION: This publication contains technical or operational information that is for official government use only. Distribution is limited to US government agencies. Requests from outside the US government for release of this publication under the Freedom of Information Act or the Foreign Military Sales Program must be made to HQ TRADOC, Fort Monroe, VA 23651.

August 1996

HEADQUARTERS
DEPARTMENT OF THE ARMY

*Supersedes GTA 3-6-5, August 1993

MEANING OF LINE ITEMS IN NBC REPORTS

LINE	NUCLEAR	CHEMICAL & BIOLOGICAL	REMARKS
A	Strike serial number	Strike serial number	Assigned by NBC Center
B	Position of observer	Position of observer	Use coordinates or place.
C	Direction of attack, from observer; include unit of measure	Direction of attack, from observer; include unit of measure	Nuc: DGM, DGT, DGG, or MLM, MLT or MLG. Chem: Measure clockwise from grid or magnetic north (in degrees or mils).
D	Date-time of detonation	Date-time of start of attack	Nuc: Use Zulu time. Chem: State time zone used.
E	Illumination time	Date-time of end of attack	Nuc: Use seconds. Chem: state time zone used.
F	Location of area attacked	Location of area attacked	Grid coordinates or place. State actual or estimated location.
G	Means of delivery	Kind of attack	State attack by artillery, mortars, rockets, missiles, bombs, or spray.
H	Type of burst	Type of agent/ type of burst/ persistency. P (persistent), NP (nonpersistent)	Nuc: Air, surface, or unknown. Chem: Air, ground, or spray attack.
I	NA	Number of munitions or aircraft	If known.
J	Flash-to-bang time	NA	Use seconds.
K	Presence or absence of crater and diameter	Description of terrain and vegetation	Nuc: In meters. Chem: Use in NBC 6.
L	Cloud width at H + 5 min	NA	Degrees or mils.

LEGEND:
DGM - deg magnetic north (mils = MLM)
DGT - deg true north (mils = MLT)
DGG - deg grid north (mils = MLG)

1

- continued

MEANING OF LINE ITEMS IN NBC REPORTS

LINE	NUCLEAR	CHEMICAL & BIOLOGICAL	REMARKS
M	Stabilized cloud top or cloud bottom angle, or cloud top or bottom height at H + 10 min	NA (Removed from CB reports by ATP45/STANAG 2103)	State angle as cloud top or bottom in degrees or mils. State height as cloud top or bottom in meters or feet.
N	Estimated yield	NA	In KT's.
O	Reference data-time for estimated contour line when not H + 1	NA	Used when contours are not plotted at H + 1.
P	For radar purposes only	NA	
PA	For radar purposes only Coordinates of external contours of radioactive cloud	Predicted hazard area coordinates	If wind speed is 10 kmph or less, this item is 010 (the radius of the hazard area in km).
PAR	Coordinates of external contours of radioactive cloud	NA	Six-digit coordinates. Letter R for radar set.
PB	Downwind direction of radioactive cloud	Duration of hazard in attack and hazard areas	Chem: In days, hours, minutes, etc.
PBR	Downwind direction of radioactive cloud and unit of measure	NA	DGM, MLM, DGT, MLT, DGG, or MLG. Letter R for radar set.
Q	Location of reading	Location of detection and type.	Grid coord or place. Chem: Air or liquid.
R	Dose rate or actual value of decay exponent	NA	In cGyph.
S	Date-time of reading	Date-time contamination detected	For initial sample or reading
T	H + 1 date-time	Date-time of latest contamination survey of the area	NBC 5 and NBC 6 reports only.

2

MEANING OF LINE ITEMS IN NBC REPORTS

LINE	NUCLEAR	CHEMICAL & BIOLOGICAL	REMARKS
U	1,000 - cGyph contour line	NA	Plot in red.
V	300-cGyph contour line	NA	Plot in green.
W	100-cGyph contour line	NA	Plot in blue.
X	20-cGyph contour line (30-cGyph used by other NATO forces)	Area of actual contamination	Plot in black for nuclear -yellow for chemical
Y	Direction of left and right radial lines (degrees or mils)	Downwind direction of hazard and wind speed	Nuc: 4 digits for direction; 4 digits for each radial line Chem: 4 digits for direction; 3 digits for wind speed.
Z	Effective wind speed	NA	3 digits (kmph). (If wind speed is less than 8 kmph, this line contains only the radius of Zone 1.)
	Downwind distance of Zone 1 Cloud radius		3 digits (km). 2 digits (km).
ZA	NA	Significant weather phenomena	1 digit for air stability; 2 digits for temperature (°C); 1 digit for humidity; 1 digit for significant phenomena; 1 digit for cloud cover.
ZB	Used to transmit correlation or transmission factors	Remarks	Include any additional information.
ZI	Effective windspeed Downwind distance Zone I Downwind distance Zone II Cloud radius	Remarks	3 digits (kmph) 4 digits (hundreds of meters) 4 digits (hundreds of meters) 3 digits (hundreds of meters)

3

CHEMWARN	
LINE	CONTENT
A	AF002 Chem
D	020830Z
F	PG 560750
G	Artillery ground burst
H	Nonpersistent nerve
PA	PG 558751
	PG 559754
	PG 632774
	PG 610694
	PG 558747
Y	0015 Deg 015 kmph

CHEMWARN FORMAT	
LINE	MEANING
A	Strike serial number
D	Date-time of start of attack
F	Location of area attacked
G	Kind of attack
H	Type of agent/type of burst/persistence, P (persistent) NP (nonpersistent)
PA	Predicted hazard area coordinates
PB	Duration of hazard in attack and hazard area
Y	Downwind direction of hazard and wind speed

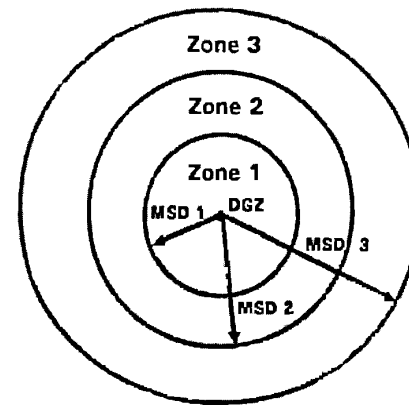
11

STRKEWARN (NUCLEAR)		
LINE	MULTIPLE	SINGLE
A	Lamp post	AC002
D	162025Z	270915Z
	162155Z	270930Z
F2	PA613423	
	PA616515	
	PA655523	
	PA631450	
	PA625413	
F3	PA602403	011 PA215154
	PA605536	
	PA672552	
	PA642472	
	PA673442	
H	3 Surface	Surface
I	22	

Note: If the burst is to be a surface burst, an NBC 3 (nuclear) report (containing line ZULU INDIA) should be prepared for separate transmission.

STRIKEWARN FORMAT (NUCLEAR)	
LINE	CONTENT
A	Target number, nickname, or code word
D	Multiple Burst: Date-time attack will start, followed by date-time attack will end (Zulu). Single Burst: Date-time of attack, followed by date-time will be canceled (Zulu).
F1	Multiple: Grid coordinates of MSD 1 box. Single: MSD 1, in 3 digits, in hundreds of meters, followed by grid coord of GZ or DGZ. (If more than one MSD, include GZ or DGZ only in first Foxrot line sent.)
F2	Multiple: Grid coordinates of MSD 2 box. Single: MSD 2 in 3 digits, in hundreds of meters, followed by grid coordinates of GZ or DGZ, if first Foxrot line sent.
F3	Multiple: Grid coordinates of MSD 3 box. Single: MSD 3 in 3 digits, in hundreds of meters, followed by grid coordinates of GZ or DGZ, if this is the only Foxrot line sent.
H	Number of bursts: if more than one, followed by "Surface." If all airbursts, do not use.
I	Number of bursts in multiple attacks. If only one burst, do not use.

12



SIGNIFICANCE OF PREDICTED FALLOUT ZONES	
Exposed, unprotected people may receive the following doses from fallout:	
Zone I	Immediate operational concern. More than 150 cGy in 4 hours.
Zone II	Secondary hazard. Less than 150 cGy within 4 hours. More than 50 cGy within 24 hours.
Outside the predicted area	No more than 50 cGy in 24 hours. No more than 150 cGy for an indefinite period.

PROTECTION REQUIREMENTS			
RADIUS	CORRESPONDING TO --	ZONE	REQUIREMENTS
MSD 1	Limit of negligible risk to warned and protected personnel	1	Evacuate all personnel (if unable to evacuate, seek as much protection as possible and report to next higher headquarters.)
MSD 2	Limit of negligible risk to warned and exposed personnel	2	Maximum protection (Personnel are in "buttoned up" tanks or sheltered in foxholes with overhead protection.)
MSD 3	Limit of negligible risk to warned and exposed personnel	3	Minimum protection (Personnel are prone on open ground with all skin areas covered.)
Beyond MSD 3			No protective measures except against dazzle.

13

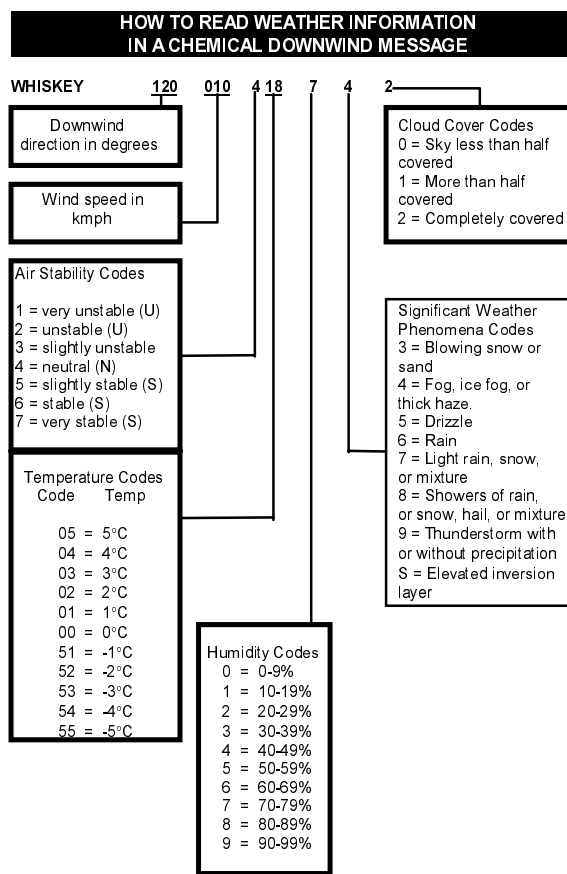
EFFECTIVE DOWNWIND MESSAGE FORMAT		
LINE	FORMAT	MEANING
ZULU	DDtttt	Date-time group winds were measured
ALFA	dddsss---	Over 0 thru 2 KT
BRAVO	dddsss---	Over 2 thru 5 KT
CHARLIE	dddsss---	Over 5 thru 30 KT
DELTA	dddsss---	Over 30 thru 100 KT
ECHO	dddsss---	Over 100 thru 300 KT
FOXTROT	dddsss---	Over 300 thru 1 MT
GOLF	dddsss---	Over 1 thru 3 MT

NOTES: 1. DDDttt-- This line is the date and time at which winds were measured. The letters DD represent the day, and tttt represent the hour in Zulu time (GMT). The remaining seven lines provide data for the preselected yield groups.
2. The letters ddd represent the effective downwind direction in degrees from GN.
3. The letters sss represent the effective wind speed to the nearest kilometer per hour (kmph).
4. The three hyphens (---) represent the expanded angle in degrees.

CHEMICAL DOWNWIND MESSAGE		
CDM		
110500 Zulu		110600 Zulu
1 Corps		
WM	120010 418742	
XM	125019 416742	
YM	130005 518642	

NOTES: 1. CDM is valid only for 6 hours.
2. Area affected may be a mapsheet number or an area such as 1 Corps.
3. Lines WHISKEY MIKE, XRAY MIKE, and YANKEE MIKE each contain coded weather information. Line WHISKEY MIKE is only valid for the first two hours; line XRAY MIKE for the next two hours; and line YANKEE MIKE for the last two hours.

7



8

TRANSMISSION FACTORS FOR RESIDUAL RADIATION	
ENVIRONMENTAL FACTORS SHIELDING	TF
VEHICLES	
M1 Tank	0.04
M60 Tank	0.04
M2 IFV	0.20
M3 CFV	0.20
M93 Fox Recon Vehicle	0.20
M113 APC	0.30
M109 SP Howitzer	0.20
M548 Cargo Vehicle	0.70
M88 Recovery Vehicle	0.09
M577 Command Post Carrier	0.30
M551 Armored Recon Abn Assault Vehicle	0.20
M728 Combat Engr Vehicle	0.04
HMMWV/CUCV	0.60
1/4 -ton	0.80
3/4 -ton	0.60
2-1/2 -ton	0.60
4-ton to 7-ton	0.50
HELICOPTERS (PARKED)	
OH58	0.80
UH60	0.70
CH47	0.60
ENGINEER EQUIPMENT	
M9 ACE	0.30
Grader	0.80
Bulldozer	0.50
Scraper	0.50
STRUCTURES	
Multistory Building - Top Floor	0.01
-- Lower Floor	0.10
Frame House - First Floor	0.60
-- Basement	0.10
URBAN AREA (in open)	0.70*
WOODS	0.80*
UNDERGROUND (3-foot earth cover)	0.0002
FOXHOLES	0.10

$$\text{Transmission Factor} = \frac{\text{Inside dose rate}}{\text{Outside dose rate}} \quad \text{or} \quad \text{OD} = \frac{\text{ID}}{\text{TF}}$$

$$\text{or} \quad \text{ID} = \text{TF} \times \text{OD}$$

NOTE: For vehicles with AN/VDR2s installed, users need only verify that the correct attenuation factor has been entered (IAW TM 11-6665-251-10) and then read the outside dose directly off the display. The attenuation factor is the mathematical inverse of the transmission factor. If the attenuation factor has not been set properly, refer to TM 11-6665-251-20. *These factors do not apply to ground survey dose rates.

9

CORRELATION FACTORS FOR RESIDUAL RADIATION		
ENVIRONMENTAL SHIELDING	LOCATION OF SURVEY METER	CF
VEHICLES		
M1 Tank	Turret, rear top	20.0
M60 Tank	Turret, front	25.0
	Chassis, near driver	53.0
M113 APC	Directly in front of driver on front wall	3.6
	Near first squad member on left facing forward	3.6
M2 IFV		9.1
M3 CFV		9.1
M109 SP Howitzer	Near driver, left side	3.5
	Rear, right side	3.4
M88 Recovery vehicle	Cmdr position	6.9
M577 Cmmnd Post Carrier	Near driver, right side	3.2
	Rear, left side	2.5
M551 Armored Recon Airborne Assault Vehicle	Near driver, right side	4.6
HMMWV		1.7
1/4 -ton Truck		1.3
2-1/2-ton Truck		1.7
4- to 10- ton Truck, M1008, or HEMMT		2.0
STRUCTURES		
Multistory Building - Top Floor		100.0
-- Lower Floor		10.0
Frame House - First Floor		2.0
-- Basement		10.0
UNDERGROUND SHELTER (3-foot of earth cover)		
Foxhole		5,000.0
		10.0

$$(\text{CF}) \text{ Correlation Factors} = \frac{\text{Outside dose rate}}{\text{Inside dose rate}} \quad \text{or} \quad \text{CF} = \frac{\text{OD}}{\text{ID}}$$

$$\text{or} \quad \text{OD} = \text{ID} \times \text{CF} \quad \text{ID} = \frac{\text{OD}}{\text{CF}}$$

10