### No. 28(05)/2015/D(GS-III) Government of India Ministry of Defence

New Delhi, the 5th December, 2017

### OFFICE MEMORANDUM

Subject: Restriction of Sale, Publication & Distribution of Maps.

In supersession of this Ministry's order No. F. 7 (7)/64/D(GS-III) dated 25 August, 1967 on the above mentioned subject, the Government of India has now decided to issue new guidelines on above mentioned subject. The renewal of the guidelines is necessitated so as to bring them in tune with the liberal economic regime and to accommodate the technological changes that have taken place in the field of Cartography and advancement in space based technology. The revisions of these guidelines were also necessitated with the implementation of National Map Policy – 2005, wherein two series of maps has been introduced viz. Defence Series Maps (DSMs) to cater for defence and national security requirements and Open Series Maps (OSMs) for open distribution.

- 2. Accordingly, the undersigned has been directed to say that on the issue related to Sale, Publication and Ditribution of Maps the following will apply:-
- (a) All DSMs will be classified as Restricted, i.e. available for official use only and shall not to be made available to the public. These maps should receive the protection afforded in Government offices to official documents. Where military considerations so require, a higher security classification may be adopted at the discretion of this ministry.
- (b) All other maps irrespective of their scale/format/purpose, published by Government, Non-Government or any private agency will be made available for publication and general distribution (including hosting on web-based domain) with following exceptions:-
- (i) All maps on the scale larger than 1:50,000 (i.e. 1: 25,000, 1: 10,000 and so on) with topographical information of contours and /or heights, falling in the area between the red line (as shown on the Index map enclosed as (Appendix 'A') and the border & the Indian coast line.

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S. Gopal Krishna Oy. Secretary (GS-III)

- (ii) All maps on the scale larger than 1:50,000 (i.e. 1:25,000, 1:10,000 and so on) with topographical information of contours and /or heights, of all island territories including Andaman & Nicobar Islands and Lakshadweep Islands.
- (iii) All maps where the International Boundary (IB) has not been demarcated/delineated and negotiations/discussions are not concluded (or) where the IB has been demarcated and boundary strip maps have not been signed yet the plenipotentiary level.
- (iv) All maps having Line of Control (LC)/Line of Actual Control (LAC) & Actual Ground Position Line (AGPL) and the areas in between these lines and IB.
- (v) Any map that has been classified as Restricted or higher by this Ministry.
- (3) Classification of Maps. Classification as under will be adhered to:-
- (a) All maps falling in the categories 2(b) (i) to (iv) will be classified as Restricted, i.e. available for official use only. These should receive the protection afforded in Government offices to official documents, but where military considerations so require, a higher security classification may be adopted at the discretion of this Ministry.
- (b) All maps other than DSMs falling in categories mentioned in Para 2(b) (i) & (ii) will not be published with contours/heights and Civil/Military Vulnerable Areas and Vulnerable Points (VAs/VPs). No maps other than DSMs will be published for categories mentioned in para 2 (b) (iii) & (iv).
- (c) All maps which are outside the scope of exceptions outlined in para 2(b) (i) to (iv) shall be made available to the public with contours/heights but without Civil/Military VAs/VPs.
- (d) All maps on scale larger than 1:4 Million, irrespective of their scale/format/purpose, published by Government, Non-Government or any private agency will be security vetted by this Ministry and suitable security classification will be given. However, maps showing external boundary will be vetted by Survey of India.
- (e) Maps of foreign countries prepared by any agency which show portions of the Indian side of the border, will be within the scope of the restrictions as for other maps of the Indian territories. Maps prepared by foreign countries which do not contain any portion of the Indian side of the border will be treated according to the security classification given by the government of the country.

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- 4. State Governments/Central Government Departments may undertake publication of maps and surveys of areas covered by those maps subject to following conditions:-
- (a) Conditions as stipulated at para 2 (b) will be complied with.
- (b) No information on Civil or Military VAs/VPs will be published.
- (c) All maps so prepared on the scale larger than 1:4Million, will be one-time security vetted by this Ministry prior to publication. Any value addition on the one-time vetted maps will have to be submitted for security vetting by this Ministry.
- (d) Applications from individuals or firms for publication of maps or surveys of areas covered by those maps should be submitted in the first instance to the State Governments/Central Government Departments concerned, who may either refuse the application or forward it with recommendation to this Ministry for approval. However, Government agencies shall directly approach this Ministry.
- (e) Government/Non-Government or any private agency of Indian/foreign origin may undertake aerial survey of the areas falling in unrestricted/restricted/higher security classification category provided such surveys comply with the restrictions stipulated in para 2 above and guidelines as per MoD's letter No. 28(14)/2005-D(GS-III) dated 1st May, 2006.
- 5. The officers authorised to sanction the issue of Restricted maps mentioned in para 2 above, to officers and offices under their control, when required for the execution of their official work, are shown in the <u>Appendix 'B'</u> to this letter. The concerned Ministries and Departments of the Central Government and the State Governments are delegated powers to authorise the issue of restricted maps (i.e. those falling in categories mentioned in para 2(b) (i) to (iv) above to educational and scientific institutions and to other semi-Government organisations, without reference to this Ministry, subject to the conditions prescribed in <u>Appendix 'C'</u> and those prescribed for other indentors in regard to the safe custody of such maps.
- 6. Clearance of the Ministry of Defence is essential for the Issue of restricted maps to private individuals/organizations and commercial firms. Indents for these should be countersigned by an officer of the rank of Under Secretary or above to the Government of India or by an officer of the rank of Deputy Secretary or above to the State Government before these are referred to the Ministry of Defence for obtaining a

S. Gopal Krishna Dy. Secretary (GS-III) clearance. The Government agencies concerned are required to scrutinise the purpose for which the map has been indented by the private parties and to ensure that the instructions on the safe custody of maps are followed.

- 7. Demands from individuals, commercial firms etc. for restricted maps covering areas beyond the external boundaries of India should be referred to the Ministry of External Affairs. Demands from foreign embassies/consulates in India for restricted maps should also be referred to that ministry. Demands from foreign expeditions to India for restricted map should be sponsored by their Embassies/consulates in India and referred to the Ministry of Defence.
- 8. The procedure for safe custody and for investigation of any loss of maps given in this ministry's letter No. PC 7(7)/64/D(GS.III) dated the 11<sup>th</sup> September 1965 (enclosed as <u>Appendix 'D'</u>) should invariably be followed. The form of certificate to be furnished by indentors for supply of restricted maps is annexed to the above mentioned letter. An annual certificate of safe custody of restricted maps should be furnished by the indentors on the form prescribed.

(S. Gopal Krishna)

(पत्तः, भीषास गुण्या) (S. GOPAL KRESHNA) डप सम्बद्धार Godey Scrietery

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Deputy Secretary to the Government of India

Copy to:

1. All Secretaries to the Government of India.

2. The Chief Secretaries of all State Government and Administrations.

3. Additional Director General Military Survey (GSGS).

4. Directorate of Military Intelligence.

5. Directorate of Naval Intelligence.

6. Directorate of Air Intelligence (IMINT).

7. Surveyor General India, Survey of India

8. Intelligence Bureau(Ministry of Home Affairs)

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S. Gopal Krishna
Sy Secretary (GS-III)

## List of Government Officers authorized to sanction the issue of restricted maps

- 1. List of Government Officers authorized to sanction the issue of restricted maps to the officers and offices under their control, when required for the execution of their official work:-
  - (a) All officers of the rank of Under Secretary to the Government of India and above.
  - (b) Heads and Deputy Heads of attached, subordinate Departments of India and Public Sector Units under Central & State Government.
  - (c) Deputy Directors and above of the Survey of India.
  - (d) Deputy Directors and above of the National Hydrographic Office of India.
  - (e) All officers of the rank of Deputy Secretary to State Governments and above, including Heads of their attached and subordinate Departments and Public sector Units under them.
  - (f) Commissioners and Deputy Commissioners and Collectors-incharge of Civil Divisions and Districts in India.
  - (g) All Diplomatic representatives of the Government of India abroad.
  - (h) Deputy Commissioners of Police off all state Government of Indian Territory.
  - (j) Assistant Inspector General of Police at Headquarters of State Governments.
  - (k) Deputy Inspector-General of Police, Criminal Investigation Department and/or Intelligence Branch of State Governments.
  - (I) Conservator of forests, of all states of Indian Territory, in respect of restricted maps of their Circles.

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- 2. List of officers to whom powers have been delegated to countersignindents for Restricted maps when required by officers under their control for execution of their official duties:-
  - (a) Deputy Hydrographer and Assistant Chief Civil Hydrographic Officer of the National Hydrographic Office of India.
  - (b) All Superintending Engineers of State Government Department.
  - (c) Director, Indian Aid Mission, Nepal, Katmandu.
  - (d) All Directors/Deputy Directors or Deputy Inspector Generals of Paramilitary Forces i.e. CRPF, ITBP, CISF, Assam Rifles, BSF and SSB.
  - (e) All Superintending Engineers in C.PW.D.
  - (f) Officers not below the rank of Under secretary to the Union Public service Commission.
  - (g) Chief Deputy Election Commissioner, Secretary and Under Secretaries Election Commission.
  - (h) Registrar and Deputy registrar of Supreme Court of India.
  - (j) Military Secretary/Deputy Military secretary and Under Secretary , to the President.
  - (k) Principal Private Secretary and Private Secretaries (Admn Public Personal) to the Prime Minister.
  - (I) Accountant General Central Revenue and the Assistant Comptroller and Auditor General (Personal).
  - (m) Directors/Superintending Geologist-In-Charge of the Map Production Division, Geological Survey of India.
  - (n) Deputy Educational advisors and above, Ministry of Education.
  - (o) Director of Geology, Oil & Natural Gas Corporation (ONGC).
  - (p) Divisional Head, Atomic Energy Establishment, Trombay, ISRO and IIRS.
  - (q) Assistant Librarian and above, National Library, Kolkata.

S. Gópar Kristina Dy Sociatary (GS-III)

- (r) Senior Specialist, Land Resources, Planning Commission, New Delhi.
- (s) Director General and Secretaries, Council of Scientific and Industrial Research (CSIR).
- (t) Vice Chancellor of Central and State Universities.

S. Gopal Krishna Dy. Secrotary (GS-III)

# Conditions to be followed by Departments of Central or State Governments while issuing Restricted Maps to Educational/Scientific institutions or to other Semi-Government organizations

- 1. The following conditions are to be followed by Departments of Central or State Governments while issuing Restricted Maps to Educational/Scientific institutions or to other Semi-Government organizations: -
  - (a) The map is treated as confidential and every precaution taken to prevent its being lost.
  - (b) The map is kept by a responsible officer designated by the Head of the institution or organisation concerned in safe custody and physically checked from time to time. This officer should also ensure that the map is not seen or handled by unauthorised persons.
  - (c) A map, when required by excursion parties, is given in charge of the leader (normally to be an Indian National and an officer of the Institute/University/college/School/organisation) who will be responsible for the correct handling of the map and for handing it back to the Institute/university/college/School/Organisation, when no longer required for the purpose.
  - (d) The authorities of the Institute/University/college/School/ Organisation will be responsible at all times for the safety of the map and to ensure that the rules made are being duly observed.
  - (e) Each indentor should clearly indicate the purpose for which the map is required. It should be ensured by the State Governments/ Administrations/Ministries of the Central government that the map is required for a bonafide purpose. Indents for restricted maps for issue to these institutions/ organisations, will be duly countersigned by an officer of the rank of Under Secretary or above to the Government of India, or by an officer of the rank of Deputy-Secretary-or above to the State Government.

(Note: The term "other semi-government organisation" used in this Para would cover government companies, public undertakings, etc., where the

S. Gopar Krishna

Ministry/Department concerned of the central/State government has some control over the manner in which their officers conduct business. Private limited companies and other concerns over which the State Government/Administration or Ministry have no control will, however, be treated like private individuals for the purpose of issue of restricted maps.)

S. Gopal Krishna Dy. Secretary (GS-III) No. PC F.7(7)/64/D(GS-III)

### GOVERNMENT OF INDIA MINISTRY OF DEFENCE

NEW DELHI, the 11th September, 1965

To,

The Chief Secretary to all State Government and Administration

Subject: Loss of Restricted maps: Investigation & Action.

Sir

I am directed to say that on considerations of security particularly during the present Emergency, it has been decided to lay down a clear procedure for investigation of losses by the holders/recipients of restricted maps, both official and private, apart from reporting the loss to the Ministry of Defence.

- 2. According to section 5(1) (d) of the Official Secrets Act failure to take responsible care of a secret document is an offence, punishable under section 5(4) of the same Act. Prior to the promulgation of the Defence of India Act such an offence was not cognizable, but it has now been made cognizable under this Act and the punishment has also been increased to 5 years (and even 10 years, in certain cases) of imprisonment.
- 3. Since the offence I now cognizable, so long as the Defence of India Act is in force, it will be incumbent on local police authorities to investigate into a loss whenever it is reported to them. During investigation, it will be essential for the indentors, both private and official, to show that reasonable care of the document was taken by them; otherwise, they will be liable for punishment under the official Secret Act read with the Defence of India Act. Accordingly, under the revised terms of issue, it has been made incumbent on private indentors to report all losses of maps to the police also.
- 4. As regards the loss of restricted maps issued to the Government officials, departments, and organization including those under the control of State

S. Gonal Krishna

Government, for the execution of their official work a departmental enquiry should invariably be held into the loss of maps in order to:-

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- (a) Establish the authenticity of the circumstances of such loss;
- (b) Satisfy that the maps have not fallen into the hands of or passed on to unauthorized/undesirable persons;
- (c) Devise/improve upon the precautionary measures for the handling and safe custody of maps to prevent recurrence of such losses; and
- (d) Take disciplinary action against the person responsible for the loss.
- 5. In addition, losses of maps should be reported to the local police whenever foul play is suspected for if the circumstances of loss so warrant.
- 6. This is in modification of the provisions of this Ministry's letter No. F.119/49/D.1. dated the 13<sup>th</sup> Nov, 1950 as amended from time to time, and No.F.7(7)/64/D (GS-III) dated the 28<sup>th</sup> April 1965 in so far as they relate to loss of restricted maps. The existing certificate on the indent for restricted maps will be substituted by the attached certificate. A certificate of safe custody should be sent to the Survey of India (Place of issue)/Chief Secretary of the State Government by the 31sr December every year.
- 7. With reference to para 1(viii) of this Ministry's letter of the 28<sup>th</sup> April 1965, it is clarified that the maps which become unserviceable due to wear and tear or otherwise should be returned to the Chief Secretary of the State Government if their issue had been authorized by that Govt and to the Surveyor General of India in other cases.
- 8. I am to request that suitable administrative instructions be issued by the State Government to all concerned and that the result of the police investigation/departmental enquiry be communicated to this Ministry in all cases of loss of restricted maps.

Yours faithfully,

Sd/-A.C.Bose
Deputy Secretary to the Govt of

India.

S. Gopal Krishna Dv. Secretary (GS-III) All Ministries

| CERTIFICATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| (Name) agree that the sale to me of the undermentioned "Restricted Map" Sheets is subject to the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ollowing conditions which I hereby undertake to observe :-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| (i) The sheets will be treated as very confidential and I will take ever reasonable precaution to prevent their being lost or being seen by afforder access to in any manner to unauthorized persons.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul> <li>(ii) I understand that the restricted map sheets have been entrusted confidence to me by a person holding office under Govt and in the event my failure to take reasonable care of, or so conducting my self as endanger the safety of the map, I shall be guilty of an offence under section 5(1)(d) of the Official Secret Act, 1923. I have carefully read and understood the other provisions of the Official Secret Act, 1923 and fully understood the duty imposed on by the Act in respect of the custody, use and communication of the information contained in the said map entrusted in confidence to me, have also understood that I would expose myself to criminal liability not only if the case of an intentional or willful act but also one arising out of my recklessness or ordinary negligence.</li> <li>(iii) No sheet will be reproduced in part, or in whole either by photograph or by any other means.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| (iv) I will maintain a proper record of all the restricted map issued to mand undertake to periodically check these physically. I will furnish an annual certificate to the Survey of India                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| meantime, I will return the sheet/s to the Director of Military Intelligence or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

S. Gopal Krishna Dy. Secretary (GS-III)

| their representatives. I also undertake to return to the *Chief Secretary to the Govt of(Name of State/U.T/**Survey of India for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| -2-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| destruction, the maps which become unserviceable due to wear and tear or otherwise. I will claim no refund of the price of the map/s on returning it/them.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| *For maps, the issue of which is authorized by officers of the State Govt/Union Territory.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| **For maps, the issue of which is authorized by officers of the Central Govt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| (vi) I will immediately report the loss to the Ministry of Defence, New Delhi and also to the Head of the Deptt, Ministry of * (Name of Chief Secretary to the Govt of @ (Name of State)/Union Territory/nearest Police Station % and the Chief Secretary to the Govt of (Name of State/U.T) and to the Survey of India for investigation and report to the Ministry of Defence.  I have understood that the loss of the restricted map may amount to an offence under Official Secrete Act and that I am legally bound to give information about the offence immediately upon receiving knowledge about failure to report about the loss would render me liable for prosecution under |
| section 202 of the Indian Penal Code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| (vii) I also undertake not to export map/s abroad without the prior approval of the Ministry of Defence. Title of map and sheet No No of copies '                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Place                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Note: "The Survey of India map offices are responsible for obtaining the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| annual certificate of safe custody and for recall and destruction of restricted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| maps after (use, for all issues authorized by the Central Govt. In case where he competent countersigning authority is an officer of the State Govt. or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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the Head of State Govt, Department, the responsibility for obtaining the annual certificate and for recall and destruction of restricted maps has been entrusted to the Chief Secretary of State/Union Territory concerned".

## ANNUAL CERTIFICATE OF SAFE CUSTODY OF RESTRICTED MAPS (TO BE SUBMITTED BY 31<sup>ST</sup> DECEMBER EVERY YEAR)

| Map Issue Office | Invoice No. | Details of Maps | No. of copies |
|------------------|-------------|-----------------|---------------|

Certified that the restricted maps detailed above have been checked and are in safe custody. Proper precautions for their security are being ensured by me.

(Signature of Indenting Officer)

\*In the case of Central Govt. offices & undertakings.
@In the case of State Govt. offices and undertakings.
%In the case of private indentors.

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| G42            | G H 1 J K L   | 6 H G44 J K L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 645 H 645 H & L | G46 J K          | G47  |
| الم الم        | MNOPOR        | MNOPQR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | M N O P O R     | P P P            |      |
| A TOWN         | STUVWX        | STUVWX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | S T U V W X     | 5 The Late       |      |
| CHOE F         | A 8 C D E F   | A 8 C C E F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A B C D Et F    | A STOUD E        |      |
| F42            | 1 F48 P O R   | 9 H I J K L<br>F44<br>M N O P O R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | M N OF R        | м и о            | F47  |
| W.X            | s T U V W X   | STUVWX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | S T V V X       | 5 T              |      |
|                | 170 0 0 5 6   | A B C D E F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 466             |                  |      |
| F 10           | 35 H I J K L  | G H I J K F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | E45             | E46              | E47  |
| E42            | MAOFOR        | MNOPER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 245             | E46              | E+7  |
|                | TUVWX         | s T UTTW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                  |      |
|                | 8 € F         | A B C D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                 |                  |      |
| D42            | H DABJK L     | 9 H = 1D#4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | D45             | D46 <sup>J</sup> | D47  |
|                | O P G R       | M N4/0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 | 0 A P = 0        |      |
|                | LA P ALE E    | 4 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 | 900 p            |      |
|                | а н J\я ь     | C44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.45            | 9,5              | 0.47 |
| C42            | C43           | C44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | C45             | , C46            | C47  |
|                | 1 1           | /s /                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                 | 100              |      |
|                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 | Cr <sub>2</sub>  |      |
| B42            | B43           | B44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | B45             | B46              | 847  |
|                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                  |      |
|                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                  |      |
|                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                  |      |