# Please do not upload this copyright pdf document to any other website. Breach of copyright may result in a criminal conviction.

This Acrobat document was generated by me, Colin Hinson, from a document held by the Henlow Signals Museum, believed to be out of copyright. It is presented here (for free) and this pdf version of the document is my copyright in much the same way as a photograph would be. If you believe the document to be under other copyright, please contact me.

The document should have been downloaded from my website <u>https://blunham.com/Radar</u>, or any mirror site named on that site. If you downloaded it from elsewhere, please let me know (particularly if you were charged for it). You can contact me via my Genuki email page: <u>https://www.genuki.org.uk/big/eng/YKS/various?recipient=colin</u>

You may not copy the file for onward transmission of the data nor attempt to make monetary gain by the use of these files. If you want someone else to have a copy of the file, point them at the website. (<u>https://blunham.com/Radar</u>). Please do not point them at the file itself as it may move or the site may be updated.

It should be noted that most of the pages are identifiable as having been processed by me.

I put a lot of time into producing these files which is why you are met with this page when you open the file.

In order to generate this file, I need to scan the pages, split the double pages and remove any edge marks such as punch holes, clean up the pages, set the relevant pages to be all the same size and alignment. I then run Omnipage (OCR) to generate the searchable text and then generate the pdf file.

Hopefully after all that, I end up with a presentable file. If you find missing pages, pages in the wrong order, anything else wrong with the file or simply want to make a comment, please drop me a line (see above).

It is my hope that you find the file of use to you personally – I know that I would have liked to have found some of these files years ago – they would have saved me a lot of time !

Colin Hinson In the village of Blunham, Bedfordshire.

## TYPE 12 A

**PPI** with single mainscan and one interscan which displays either a range and bearing line or a CRDF line, by selection.

Cathode ray tube: 12 inch (30 cm.) diameter.

Spot size: 0.2 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus range and bearing line or D/F line, selectable by switch.

**Range scales:** four pre-set, selectable by push button: Type 12A/M1—15, 30, 60 and 120 n.m. per radius. Type 12A/M2—30, 60, 120 and 240 n.m. per radius. Type 12A/K2—25, 50, 100 and 200 km. per radius. Type 12A/K4—50, 100, 200 and 400 km. per radius. Other scales to special order subject to minimum scale of 0-5 n.m. and a ratio of maximum to minimum scale of 10:1 maximum.

**Range expansion:** registration of mainscan and interscan is maintained. Expansion, when off-centred, is about tube centre.

**Off-centring:** up to maximum range with registration of mainscan and interscan maintained.

Accuracy of measurements made with a centred interscan: better than  $0.5^{\circ}$  in bearing; better than 0.5% of actual range or 0.25% of maximum range, whichever is the greater.

Accuracy of the display relative to an overlay: better than  $1^{\circ}$  in bearing, better than 1% of range scale in use or 0.5 n.m., whichever is the greater.

*Note*—Bearing accuracies are stated relative to the aerial bearing resolver shaft.

**Timing:** Type 12A/M1 or K2—any PRF to maximum of 640 p.p.s.

Type 12A/M2 or K4—any PRF to maximum of 325 p.p.s. Higher PRFs can be provided to special order to suit

special range scales. Deflection recovery time with deflection over the full

diameter of the c.r.t. (settling to within 0.025% of the diameter) is less than 60  $\mu secs.$ 



Video: peak signal 3 volts maximum. Shoulder noise input 0.3 volts minimum. This 10:1 signal to noise ratio can be limited to 2:1 by the action of built-in limiter and pre-limiter controls. Bandwidth better than 5 Mc/s at -3 dB. Droop less than 10% in 5 milliseconds.

**Trigger:** input 5 volts positive going, 1  $\mu$ sec duration; pulse 1 to 5  $\mu$ secs in advance of radar zero time.

Calibration: Type 12A/M1 and M2—rings at 5 and 40 n.m. intervals.

Type 12A/K2 and K4-rings at 5 and 50 km. intervals.

Aerial turning data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit. If a suitable resolver is not available an Aerial Servo Unit Type 56 can be provided to handle other forms of turning data. This unit is described in the Series 5 General Specification.

**Environment:** Types 12A/M/A and 12A/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 200 watts of heat is exhausted from a vent at the back of the viewing unit.

Types 12A/M/L and 12A/K/L are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}C$  to  $+55^{\circ}C$ . Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding  $35^{\circ}C$ .

**Power supply:** 230 volts,  $\pm$ 7%, 50 or 60 cycles. Approximate consumption 250 VA. 115 volt version to special order.

**Overall dimensions:** 18<sup>3</sup>/<sub>4</sub> in. (48 cm.) wide, 40 in. (102 cm.) deep, 23 in. (58 cm.) high.

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 12A displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table mount and the junction pack for terminating installation cables.



DECCA RADAR LIMITED, 9 Albert Embankment, London S.E.1, England

### TYPE 12 B

**PPI** with single mainscan and one interscan symbol. This symbol may be controlled either from a local rolling ball or from a remote point.

Cathode ray tube: 12 inch (30 cm.) diameter.

Spot size: 0.2 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus one symbol marker. This marker may be any one of the following forms, by internal selection: circle, horizontal ellipse, vertical ellipse, square, horizontal rectangle, vertical rectangle or spot.

**Range scales:** four pre-set, selectable by push button: Type 12B/M1—15, 30, 60 and 120 n.m. per radius. Type 12B/M2—30, 60, 120 and 240 n.m. per radius. Type 12B/K2—25, 50, 100 and 200 km. per radius. Type 12B/K4—50, 100, 200 and 400 km. per radius. Other scales to special order subject to minimum scale of 0-5 n.m. and a ratio of maximum to minimum scale of 10:1 maximum.

**Range expansion :** registration of mainscan and interscan is maintained. Range expansion when off-centred is about tube centre.

**Off-centring:** up to maximum range, with registration of mainscan and interscan maintained.

Accuracy of measurements made with the interscan: x and y accuracy better than 1% of actual x or y component, or 0.5% of maximum range, whichever is the greater.

Accuracy of the display relative to an overlay: better than 1° in bearing; better than 1% of range scale in use or 0.5 n.m., whichever is the greater.

*Note*—Bearing accuracies are stated relative to the aerial bearing resolver shaft.

**Timing:** Type 12B/M1 or K2—any PRF to maximum of 600 p.p.s.

Type 12B/M2 or K4—any PRF to maximum of 315 p.p.s. Higher PRFs can be provided to special order to suit

special range scales. Deflection recovery time with deflection over the full

diameter of the c.r.t. (settling to within 0.025% of the diameter) is less than 60 µsecs.



Video: peak signal 3 volts maximum. Shoulder noise input 0.3 volts minimum. This 10:1 signal to noise ratio can be limited to 2:1 by the action of built-in limiter and pre-limiter controls. Bandwidth better than 5 Mc/s at -3 dB. Droop less than 10% in 5 milliseconds.

**Trigger:** input 5 volts positive going, 1  $\mu$ sec duration; pulse 1 to 5  $\mu$ secs in advance of radar zero time.

**Calibration :** Type 12B/M1 and M2—rings at 5 and 40 n.m. intervals.

Type 12B/K2 and K4—rings at 5 and 50 km. intervals.

Aerial turning data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit. If a suitable resolver is not available an Aerial Servo Unit Type 56 can be provided to accept other forms of turning data. This unit is described in the Series 5 General Specification.

**Environment:** Types 12B/M/A and 12B/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 200 watts of heat is exhausted from a vent.

Types 12B/M/L and 12B/K/L are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}$ C to  $+55^{\circ}$ C. Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding 35°C.

**Power supply**: 230 volts,  $\pm$ 7%, 50 or 60 cycles  $\pm$ 5 cycles. Approximate consumption 250 VA. 115 volt version to special order.

**Overall dimensions:**  $18\frac{3}{4}$  in. (48 cm.) wide, 40 in. (102 cm) deep, 21 in. (58 cm.) high.

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 12B displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table mount and the junction pack for terminating installation cables.

### TYPE 12 C

PPI with single mainscan and four characteristically shaped interscan symbols. One symbol can be controlled from a local rolling ball and the remainder from remote positions.

Cathode ray tube: 12 inch (30 cm.) diameter.

Spot size: 0.2 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus four symbol markers. These markers may be any one of the following forms, by internal selection: circle, horizontal ellipse, vertical ellipse, square, horizontal rectangle, vertical rectangle or spot.

**Range scales:** four pre-set, selectable by push button: Type 12C/M1—15, 30, 60 and 120 n.m. per radius. Type 12C/M2—30, 60, 120 and 240 n.m. per radius. Type 12C/K2—25, 50, 100 and 200 km. per radius. Type 12C/K4—50, 100, 200 and 400 km. per radius. Other scales to special order subject to minimum scale of 0-5 n.m. and a ratio of maximum to minimum scale of 10:1 maximum.

**Range expansion :** registration of mainscan and interscan is maintained. Range expansion when off-centred is about tube centre.

**Off-centring:** up to maximum range, with registration of mainscan and interscan maintained.

Accuracy of measurements made with the interscan: x and y accuracy better than 1% of actual x or y component, or 0.5% of maximum range, whichever is the greater.

Accuracy of the display relative to an overlay: better than 1° in bearing; better than 1% of range scale in use or 0.5 n.m., whichever is the greater.

*Note*—Bearing accuracies are stated relative to the aerial bearing resolver shaft.

**Timing:** Type 12C/M1 or K2—any PRF to maximum of 600 p.p.s.

Type 12C—M2 or K4—any PRF to maximum of 315 p.p.s. Higher PRFs can be provided to special order to suit special range scales.

Deflection recovery time with deflection over the full diameter of the c.r.t. (settiling to within 0.025% of the diameter) is less than 60 µsecs.



Video: peak signal 3 volts maximum. Shoulder noise input 0.3 volts minimum. This 10:1 signal to noise ratio can be limited to 2:1 by the action of built-in limiter and pre-limiter controls. Bandwidth better than 5 Mc/s at --3 dB. Droop less than 10% in 5 milliseconds.

**Trigger:** input 5 volts positive going, 1  $\mu$ sec duration; pulse 1 to 5  $\mu$ secs in advance of radar zero time.

**Calibration :** Type 12C/M1 and M2—rings at 5 and 40 n.m. intervals.

Type 12C/K2 and K4—rings at 5 and 50 km. intervals.

Aerial turning data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit. If a suitable resolver is not available an Aerial Servo Unit Type 56 can be provided to accept other forms of turning data. This unit is described in the Series 5 General Specification.

**Environment:** Types 12C/M/A and 12C/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 200 watts of heat is exhausted from a vent.

Types 12C/M/L and 12C/K/L are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}C$  to  $+55^{\circ}C$ . Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding  $35^{\circ}C$ .

**Power supply:** 230 volts,  $\pm 7\%$ , 50 or 60 cycles  $\pm 5$  cycles. Approximate consumption 250 VA. 115 volt version to special order.

**Overall dimensions:**  $18\frac{3}{4}$  in. (48 cm.) wide, 40 in. (102 cm) deep, 21 in. (58 cm.) high.

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 12C displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table mount and the junction pack for terminating installation cables.



DECCA RADAR LIMITED, 9 Albert Embankment, London E.C.1, England

### TYPE 12 H

Height/range display with mainscan and one interscan line for height measurement.

Cathode ray tube: 12 inch (30 cm.) diameter.

Spot size: 0.2 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus height line corrected for earth curvature.

Horizontal scales: four pre-set, selectable by push button: Type 12H/M1—15, 30, 60 and 120 n.m. per radius. Type 12H/M2—30, 60, 120 and 240 n.m. per radius. Type 12H/K2—25, 50, 100 and 200 km. per radius. Type 12H/K4—50, 100, 200 and 400 km. per radius.

Vertical scales: Type 12H/M1 and 12H/M2, 0 to 60,000 ft. Type 12H/K2 and 12H/K4, 0 to 20,000 m. Other scales to special order subject to maximum height scale between 45,000 and 100,000 ft. Ratio of maximum to minimum of horizontal scale 10:1 maximum.

**Range expansion :** registration of mainscan and interscan is maintained. Range expansion when off-centred is about tube centre.

**Off-centring:** up to maximum range, with registration of mainscan and interscan maintained.

Accuracy: the instrumental accuracy of height measurements made with the interscan line is  $\pm$ 750 ft. (RMS) referred to the elevation angle resolver shaft and measured on the HRI operator's calibrated height control for target at 150 n.m. range.

**Timing:** Type 12H/M1 or K2—any PRF to maximum of 640 p.p.s.

Type 12H/M2 or K4—any PRF to maximum of 325 p.p.s. Higher PRFs can be provided to special order to suit special range scales.

Deflection recovery time with deflection over the full diameter of the c.r.t. (settling to within 0.025% of the diameter) is less than 60 µsecs.



**Trigger:** input 5 volts positive going, 1  $\mu$ sec duration; pulse 1 to 5  $\mu$ secs in advance of radar zero time.

Calibration : Type 12H/M1 and M2-marks at 5 and 40 n.m. intervals.

Type 12H/K2 and K4-marks at 5 and 50 km. intervals.

Aerial elevation data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit.

**Environment:** Types 12H/M/A and 12H/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 200 watts of heat is exhausted from a vent.

Types 12H/M/L/ and 12H/K/L/ are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}$ C to  $+55^{\circ}$ C. Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding 35°C.

**Power supply :** 230 volts,  $\pm 7\%$ , 50 or 60 cycles  $\pm 5$  cycles. Approximate consumption 250 VA. 115 volt version to special order.

**Overall dimensions:** 18<sup>3</sup>/<sub>4</sub> in. (48 cm.) wide, 40 in. (102 cm.) deep, 21 in. (58 cm.) high.

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 12H displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table mount and the junction pack for terminating installation cables.



DECCA RADAR LIMITED, 9 Albert Embankment, London S.E.1, England

#### TYPE 21 A

**PPI** with single mainscan and one interscan which displays either a range and bearing line or a CRDF line, by selection.



Spot size: 0.3 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus range and bearing line or D/F line, selectable by switch.

**Range scales:** four pre-set, selectable by push button: Type 21A/M1—15, 30, 60 and 120 n.m. per radius. Type 21A/M2—30, 60, 120 and 240 n.m. per radius. Type 21A/K2—25, 50, 100 and 200 km. per radius. Type 21A/K4—50, 100, 200 and 400 km. per radius. Other scales to special order subject to minimum scale of 0-5 n.m. and a ratio of maximum to minimum scale of 10:1 maximum.

**Range expansion:** registration of mainscan and interscan is maintained. Range expansion when off-centred is about tube centre.

**Off-centring:** up to maximum range, with registration of mainscan and interscan maintained.

Accuracy of measurements made with a centred interscan: better than  $0.5^{\circ}$  in bearing; better than 0.5% of actual range or 0.25% of maximum range, whichever is the greater.

Accuracy of the display relative to an overlay: better than 1° in bearing; better than 1% of range scale in use or 0.5 n.m., whichever is the greater.

*Note*—Bearing accuracies are stated relative to the aerial bearing resolver shaft.

**Timing:** Type 21A/M1 or K2—any PRF to maximum of 640 p.p.s.

Type 21A/M2 or K4—any PRF to maximum of 325 p.p.s. Higher PRFs can be provided to special order to suit special range scales.

Deflection recovery time with deflection over the full diameter of the c.r.t. (settling to within 0.025% of the diameter) is less than 60 µsecs.



**Trigger:** input 5 volts positive going, 1 µsec duration; pulse 1 to 5 µsecs in advance of radar zero time.

**Calibration :** Type 21A/M1 and M2—rings at 5 and 40 n.m. intervals.

Type 21A/K2 and K4-rings at 5 and 50 km. intervals.

Aerial turning data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit. If a suitable resolver is not available an Aerial Servo Unit Type 56 can be provided to accept other forms of turning data. This unit is described in the Series 5 General Specification.

**Environment:** Types 21A/M/A and 21A/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 300 watts of heat is exhausted from a vent.

Types 21A/M/L and 21A/K/L/ are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}C$  to  $+55^{\circ}C$ . Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding  $35^{\circ}C$ .

**Power supply :** 230 volts,  $\pm$ 7%, 50 or 60 cycles  $\pm$ 5 cycles. Approximate consumption 350 VA. 115 volt version to special order.

**Overall dimensions :** base  $21\frac{1}{2}$  in.  $x 21\frac{1}{2}$  in. (55 cm. x 55 cm.); height 35 in. (89 cm.); top 40 in. x 40 in. (102 cm. x 102 cm.)

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 21A displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table top and the junction pack for terminating installation cables.



### TYPE 21 C

PPI with single mainscan and four characteristically shaped interscan symbols. Three symbols are controlled from local rolling balls, the fourth is controlled by external inputs.

Cathode ray tube: 21 inch (53 cm.) diameter.

Spot size: 0.3 mm.

Centre wander: less than half a spot diameter.

**Presentation:** raw radar plus four symbol markers. These markers may be any one of the following forms, by internal selection: circle, horizontal ellipse, vertical ellipse, square, horizontal rectangle, vertical rectangle or spot.

**Range scales:** four pre-set, selectable by push button: Type 21C/M1—15, 30, 60 and 120 n.m. per radius. Type 21C/M2—30, 60, 120 and 240 n.m. per radius. Type 21C/K2—25, 50, 100 and 200 km. per radius. Type 21C/K4—50, 100, 200 and 400 km. per radius. Other scales to special order subject to minimum scale of 0-5 n.m. and a ratio of maximum to minimum scale of 10:1 maximum.

**Range expansion :** registration of mainscan and interscan is maintained. Range expansion when off-centred is about tube centre.

**Off-centring:** up to maximum range, with registration of mainscan and interscan maintained.

Accuracy of measurements made with the interscan: x and y accuracy better than 1% of actual x or y component, or 0.5% of maximum range, whichever is the greater.

Accuracy of the display relative to an overlay: better than 1° in bearing; better than 1% of range scale in use or 0.5 n.m., whichever is the greater.

*Note*—Bearing accuracies are stated relative to the aerial bearing resolver shaft.

**Timing:** Type 21C/M1 or K2—any PRF to maximum of 600 p.p.s.

Type 21C/M2 or K4—any PRF to maximum of 315 p.p.s. Higher PRFs can be provided to special order to suit special range scales.

Deflection recovery time with deflection over the full diameter of the c.r.t. (settling to within 0.025% of the diameter) is less than 60 µsecs.



Video: peak signal 3 volts maximum. Shoulder noise input 0.3 volts minimum. This 10:1 signal to noise ratio can be limited to 2:1 by the action of built-in limiter and pre-limiter controls. Bandwidth better than 5 Mc/s at -3 dB. Droop less than 10% in 5 milliseconds.

**Trigger:** input 5 volts positive going, 1  $\mu$ sec duration; pulse 1 to 5  $\mu$ secs in advance of radar zero time.

**Calibration :** Type 12C/M1 and M2—rings at 5 and 40 n.m. intervals.

Type 21C/K2 and K4—rings at 5 and 50 km. intervals.

Aerial turning data: the display requires a synchro resolver Type 23RSF4, 15RS4 or E24D/1 driven from the aerial shaft in 1:1 ratio and available for the exclusive use of the display. One display unit can be operated from an aerial synchro resolver. Up to 10 displays may be driven from a single resolver, using a distribution unit. If a suitable resolver is not available an Aerial Servo Unit Type 56 can be provided to accept other forms of turning data. This unit is described in the Series 5 General Specification.

**Environment:** Types 21C/M/A and 21C/K/A are liquid cooled internally with air exhaust of extracted heat and operate in ambients from  $-10^{\circ}$ C to  $+35^{\circ}$ C. Approximately 300 watts of heat is exhausted from a vent.

Types 21C/M/L and 21C/K/L are liquid cooled with liquid exhaust and operate in ambients from  $-10^{\circ}$ C to  $+55^{\circ}$ C. Clean coolant liquid is required at 12 gallons (55 litres) per hour at a temperature not exceeding 35°C.

**Power supply :** 230 volts,  $\pm 7\%$ , 50 or 60 cycles  $\pm 5$  cycles. Approximate consumption 350 VA. 115 volt version to special order.

**Overall dimensions:** base 21<sup>1</sup>/<sub>2</sub> in. x 21<sup>1</sup>/<sub>2</sub> in. (55 cm. x 55 cm.); height 35 in. (89 cm.); top 40 in. x 40 in. (102 cm. x 102 cm.)

The above specification is current at the time of publication but may be subject to variation due to later improvements in design or technique. Equipment will be supplied in accordance with specifications current at the time of manufacture or as otherwise agreed in writing.

Type 21C displays are available in various forms with range scales in nautical miles or kilometres and with either air or liquid exhaust of extracted heat, depending on the ambient conditions under which the unit is to work. The display consists of three units—the viewing unit, the table top and the junction pack for terminating installation cables.



DECCA RADAR LIMITED, 9 Albert Embankment, London S.E.1, England