

PROGRAMME OF ACCEPTED EXPERIMENTS

CERN INTERSECTING STORAGE RINGS

DECEMBER 1973

Table 1 : ISR Experiments running or accepted

Table 2 : ISR Experiments completed at May 1973

Figures : 1. General Layout of Experiments at the ISR

2. Layout of Intersection 1

3. Layout of Intersection 2

4. Details of Experiments R-201 and R-203

5. Layout of Intersection 4 with the SFM facility

6. Elevation view of the SFM facility

7. Sketch of the MWPC system for the SFM facility

8. Layout of Intersection 6

9. Layout of Intersection 7

10. Layout of Intersection 8

11. Details of Experiment R-802.

L. Di Lella
ISR Co-ordinator.

Table 1
ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of group	Date of NPRC Acceptance	Status
I-1	R-105	CERN/ISRC/72-13, Add. 1 and Add.2 and Add.3	To measure high transverse momentum charged particles and neutral pions	CERN-Columbia-Rockefeller-Saclay collaboration: <u>Banner</u> , <u>Blumenfeld</u> , <u>Büsser</u> , <u>Camilleri</u> , <u>Chèze</u> , <u>Cool</u> , <u>Di Lella</u> , <u>Hamel</u> , <u>Lederman</u> , <u>Pansart</u> , <u>Pope</u> , <u>Rothenberg</u> , <u>Segler</u> , <u>Smith, A.M.</u> , <u>Stirling</u> , <u>Teiger</u> , <u>Zaccone</u> , <u>Tannenbaum</u> , <u>White</u>	NPRC 85 5.11.1969	In Production.
I-1	R-106	CERN/ISRC/73-19 and Add. 1 + 2	Search for Magnetic Monopoles with the Plastic Detector Technique	Bologna-CERN/Saclay-Rome collaboration: <u>Capiluppi</u> , <u>Giacomelli</u> , <u>Rossi</u> , <u>Vannini</u> , <u>Bussière</u> , <u>Baroni</u> , <u>Diliberto</u> , <u>Petrera</u> , <u>Romano</u>	NPRC 120 5.9.1973	In Production
I-1	R-107	CERN/ISRC/73-7, Add. 1 and Add. 2	Search for Multigamma Events at the ISR	Brookhaven-Rome-Grumman collaboration: <u>Yuan</u> , <u>Dell</u> , <u>Uto</u> ; <u>Ed. Amaldi</u> , <u>Beneventano</u> , <u>Borgia</u> , <u>Pistilli</u> , <u>Sestili</u> ; <u>Dooher</u>	NPRC 122 14.11.1973	Installation expected second half 1974

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Data of NPRC Acceptance	Status
1-2	R-201	CERN/ISRC/69-5 and Add.1-7 CERN/ISRC/69-9	Particle production at small angles	CERN-Holland-Lancaster-Manchester Collaboration: Albrow, Barber, Brooks, Bogaerts, Bosnjakovic, Chang, Clegg, <u>Erné</u> , Kooyman, Loebinger, McCubben, <u>Murphy</u> , Rudge, <u>Sens</u> , Sessoms, Timmer	NPRC 84 4.7.1969	Taking data
1-2	R-203	CERN/ISRC/69-2; 69-3; Add.1-3 CERN/ISRC/69-44; 48 ³ CERN/ISRC/70-32; CERN/ISRC/71-9	Inclusive production of high momentum particles in proton-proton collisions at the ISR	The collaboration mentioned below, and the Scandinavian Coll.: Alper, <u>Bjggild</u> , Booth, Carroll, Damgaard, <u>Von Dardel</u> , Groves, Jackson, <u>Jarlskog</u> , <u>Klovning</u> , Leistam, Lillethun, <u>Ølgaard-Nielsen</u> , <u>Prentice</u> , Quarrie, Weiss	NPRC 84 4.7.1969	Taking data till end'73
1-2	R-204	CERN/ISRC/69-3 and Add.1+2+3	Measurement of muons with large transverse momentum as a search for the intermediate vector boson	British Universities: Jeffs, Leechikwong, Lintern, <u>Pätts</u> , <u>Sharp</u> , <u>Sharrock</u> , Gibson, Manning, W. Smith	NPRC 84 4.7.1969	Taking data till end 1973
1-2	R-205	CERN/ISRC/73-27 and Add.1+2	Study of high Transverse Momentum Behaviour at the ISR	Daresbury-Liverpool-RHEL collaboration: Alper, Aston, Booth, Carroll, Clark, Duke, Groves, Holloway, Jackson, Morris, Ott, Renshall, Rock, Shah, Thresher, Wenzel	NPRC 123 5.12.1973	Installation January'74

Table 1 (cont'd)
ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Date of NPRC Acceptance	Status
I-4	R-401	CERN/ISRC/69-14 and Add. 1-5	Isobar production at ISR energies (with the forward part of the SFM detector and additional n-, trigger- and monitor counters). Special MWPC's for the compensator magnet are added for the standard set-up (built in Vienna)	CERN-Hamburg-Orsay-Vienna (CHOV) Coll.: Lohrmann, Nagy, <u>Regler</u> , Schmidt-Parzefall, Winter, Brandt, <u>Flügge</u> , Niebergall, Schubert K.R., Schumacher, Broll, Coignet, Favier, Massonnet, Vivargent, Bartl, Dibon, Gottfried, Neuhofer	NPRC 83 4.7.1969	Taking data
I-4	R-403T	CERN/ISRC/70-5	S.F.M. test	S.F.M. detector group: Charpak, Fischer, Heck, Drijard, Innocenti, <u>Minten</u> , Piuz, Maurin	NPRC 95 3.2.1971	In Production

T = Test Experiment

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Date of NPRC Approval	Status
1-4	R-406	CERN/ISRC/70-31 and Add. 1 and 2	Search for new particles at the ISR (Using Split Field Magnet)	CERN-Bologna Coll.: Bollini, Brunini, Giusti, <u>Massam</u> , Monari, Palmonari, Rimondi, Valenti, Zichichi	NPRC 110 30.8.1972	Testing Equipment
1-4	R-407 R-408	CERN/ISRC/71-30 and Add. 1 CERN/ISRC/71-34 CERN/ISRC/73-29	Two-particle correlations in the fragmentation region using the SFM. To measure inelastic proton-proton scattering at the ISR	CERN-Coll. de France-Heidelberg-Karlsruhe, Coll.: Charpak, Drijard, Fischer, Innocenti, Kittel, Minten, Morrison, Schwille, Sotiriou, Stroynowski, Szeptycka (Warsaw), Wahl; DellaNegra, Frenkiel, Ghesquière, Fontaine; Frehse, Kluge, Schneider; Hanke, Isenbeck, Köbberling, Schmidt, K.H., Schopper (DESY), <u>Wegener</u> , Zeller	NPRC 110 30.8.1972	Taking Data
1-4	R-410	CERN/ISRC/71-37, CERN/ISRC/72-7 and Add. 1-5	Study of particle correlations at large angles	MIT-Orsay. Scandinavian Coll.: Bøggild, Burger, Chen, von Dardel, <u>De Bouard</u> , Jarlskog, Klovning, Lillethun, Little, Löstad, Lu, Overgaard-Pedersen, Almehed, Smith, D., Ting, Villeneuve,	NPRC 110 30.8.1972	No Time Allocation Yet
1-4	R-411	CERN/ISRC/72-23	Double Isobar Production at the ISR to study $p + p \rightarrow (p, \pi^+ \pi^-) + (p \pi^+ \pi^-)$	Pavia-Princeton Coll.: Cavalli-Sforza, Coyne, Dolfini, <u>Goggi</u> , Mantovani, O'Neil, Piazzoli, Ratti, Scannicchio	NPRC 112 1.11.1972	First run expected April '74
1-4	R-412	CERN/ISRC/72-30 and Add. 1 and 2	Study of Large Transverse Momentum Events using the SFM and Lead Glass Gerenkov counters	Aachen-CERN-Munich Coll.: Darriulat, Derado, Dittman, Eckardt, Eggert, Gebauer, Holder, McDonald, Meinke, Modis, Navarria, Pugh, Sanders, Schmitz, Schneider, Steinberger, Thomé, Tittel, <u>Williams</u> , Seyboth	NPRC 119 4.7.1973	No Time Allocation Yet
1-4	R-413	CERN/ISRC/72-7 and Add. 1-5	Selective large p_T trigger for the SFM	The R-410 (Orsay-Scandinavian) participants and Liverpool: Booth, Carroll, Jackson (Liverpool)	NPRC 120 5.9.1973	No Time Allocation Yet

Table 1 (cont'd)
ACCEPTED ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Date of NPRC Acceptance	Status
I-1	R-602 Phase II.	CERN/ISRC/69-19, and Add. 1-12	Measurement of elastic scattering cross section and σ_T .	CERN-Aachen-Genova-Harvard-Munich Collaboration: Baum, Böhm, De Zorzi, Ellis, Foeth, Hilscher, Kernan, Fr. Müller, Naroska, Rubbia, Schinzel, Sette, Staude, Strolin, Trilling, Von Baksay	NPRC 83 4.7.1969	Re-installation expected Jan. 1974
I-6	R-603	CERN/ISRC/71-45 and Add. 1+ 2	Inclusive Measurement of Multiparticle Hadron Systems (Δ^{**})	CERN-Aachen(III. Phys. Inst.)-UCLA-Univ. of Genova (+INFN)-Univ. of Munich Collaboration: Ellis, Strolin; Von Baksay, Boehm, Foeth; Lockman, Medinris, Meyer T., Rander, Schlein, Webb; De Zorzi, Sette, Staude	NPRC 104 2.2.1972	Taking data

Table 1 (cont'd)
ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Date of NPRC Acceptance	Status
1-7	R-701	CERN/ISRC/72-17, Add.1	Observation of p-p collisions with streamer chambers	CERN-Aachen-Munich Collaboration: Darriulat, Derado, Dittman, Eckardt, Eggert, Gebauer, Holder, McDonald, Meinke, Modis, Pugh, Sanders, Schmitz, Schneider, Seyboth, Thomé, Tittel	NPRC 110 30.8.1972	Taking data

Table 1 (Cont'd)
ACCEPTED CERN ISR EXPERIMENTS

Area	Expt. Code	ISRC Reference Number	Description of Experiment	Composition of Group	Date of NPRC Acceptance	Status
1-8	R-801	CERN/ISRC/69-12 and Add.1-6	Measurement of σ_{tot} and correlations with counter hodoscopes and lead glass Cerenkov counters	Pisa-Stony Brook Collaboration: Amendolia, <u>Bellettini</u> , Braccini, Del Prete, Foà, Laurelli, Menzione, Ristori, Sanguinetti, Valdata; <u>Finocchiaro</u> , Grannis, Kephart, <u>Thun</u>	NPRC 83 4.7.1969	Running
1-8	R-802	CERN/ISRC/71-41 and Add.1+4	Particle production in the forward direction using a magnetic spectrometer and multi-wire proportional chambers	CERN-Rome Collaboration: U. Amaldi, Allaby, Bartel, Cocconi, Diddens, Dimcovski, Dobinson, Duinker, <u>Wetherell</u> ; Thorndike; Baroncelli, Bosio, <u>Matthiae</u>	NPRC 107 3.5.1972	Running
1-8	R-803	CERN/ISRC/73-11, and Add. 1-2	Study of Inclusive Particle Production at very low p_t and $X=0$	British-Scandinavian-MIT Coll.: <u>Bjggild</u> , Duff, Gibson, <u>Jarlskog</u> , Leistam, Leong, Little, Ogren-Duane, Prentice, Newman, <u>Sharrock</u> , Wu Wu	NPRC 120 5.9.1973	Installation beginning January 1974
1-8	R-804	CERN/ISRC/73-28 and Add. 1	Study of Electromagnetic Properties of Protons in the Time-like Region and Search for the Neutral Boson Z^0	Genova-Harvard-MIT-Pisa Coll.: Diambri- Palazzi, Becker, Biggs, Cook, Everhart, Gold- hagen, Little, Strauch, <u>Ting</u> ; <u>Bellettini</u> , Braccini, Castaldi, Cvasinni, Del Prete, Laurelli, Sanguinetti, Valdata	NPRC 123 5.12.1973	Installation probably some time in 1975

Table 2
ISR EXPERIMENTS COMPLETED AT DEC. 1973

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
1-1	R-101	Emulsion Exposures giving Angular distribution of charged and stopping particles between 35° and 90°	CERN-Cracow-Bucharest-Tata Emulsion Collaboration: Annoni, Cordaillat, Czyzewski, Friedländer, Gierula, Gurtu, Haiduc, Herz, Marin, Vicky, Wolter	September 1971	Published
1-1	R-102	a) Study of interactions in which gamma rays and electrons with large transverse momentum are emitted. b) Search for "Quarks" at large angles.	Saclay-Strasbourg Collaboration: Banner, Cheze, Hamel, Stirling, Teiger, Zaccane, Pansart; Bassompierre, Croissiau, Gresser, Morand, Schneegans, Riedinger	April 1972	Published
1-1	R-103	Search for Massive Dileptons	CERN-Columbia-Rockefeller Collaboration: Büsser, Camilleri, Di Lella, Placci, Pope, Smith A., Yoh, Zavattini; Blumenfeld, Lederman; Cool, Litt L., Segler	December 1972	Published
1-1	R-104T	An Exploratory Experiment on the Search for Multigamma Events	Brookhaven-Grumman-Rome Collaboration: Yuan, Uto, Dell, Doher, Amaldi, Beneventano, Borgia, Pistilli	December 1972	Published
1-2	R-202	Study of positive and negative particle production in high energy proton-proton collisions at medium and intermediate angles	Argonne-Bologna-Michigan Collaboration: Antinucci, Babcock, Bertin, Bussièrè, Capi-luppi, D'Agostino-Bruno-Ellis, Giacomelli-Krisch, Maroni, Ratner, Roberts, Rossi, Vannini	September 1971 (Positive particle production). May 1973 (Negative particle production)	Published
1-4	R-404T	Test to search for heavy baryon isomers	CERN-Hamburg-Vienna Collaboration: Dibon, Flügge, Gottfried, Nefkens, Neuhofer, Niebergall, Regler, Schmidt-Parzefall, Schubert, Schumacher, Winter	May 1973	Published

Table 2
ISR EXPERIMENTS COMPLETED AT D&S. 1973

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
1-4	R-402	Search for fractionally charged particles	CERN-Munich Collaboration: Caldwell, Fabjan, Gruhn, Hyams, Sauli, Zahniser, Bott-Bodenhausen, Stierlin, Rochester, Winstein, Tirlor	August 1972	Published
1-4	R-405	Neutron Production at small angles	CERN-Karlsruhe Collaboration: Engler, Flauger, Gibbard, Monnig, Schopper, Bartel, Schmidt	October 1972	Data analysis
1-6	R-601	p-p small angle scattering and total cross section	CERN-Rome Collaboration: Allaby, Amaldi, Bartel, Biancastelli, Bosio, Cocconi, Diddens, Dobinson, Matthiae, Wetherell	December 1972	Published
1-6	R-602	Measurement of the elastic scattering cross section beyond the Coulomb interference region. Search for "Quarks" at small angles	CERN-Aachen-Univ. Calif.-Genova-Harvard-Torino Collaboration: Baksay, Boehm, Bozzo, Di Zorzi, Ellis, Ferrero, Foeth, Maderni, Meyer, Naroska, Pilcher, Rubbia, Schlein, Sette, Staude, Strolin, Sulak, Trippe, Webb	Phase I. For Phase II see p.5.	Published

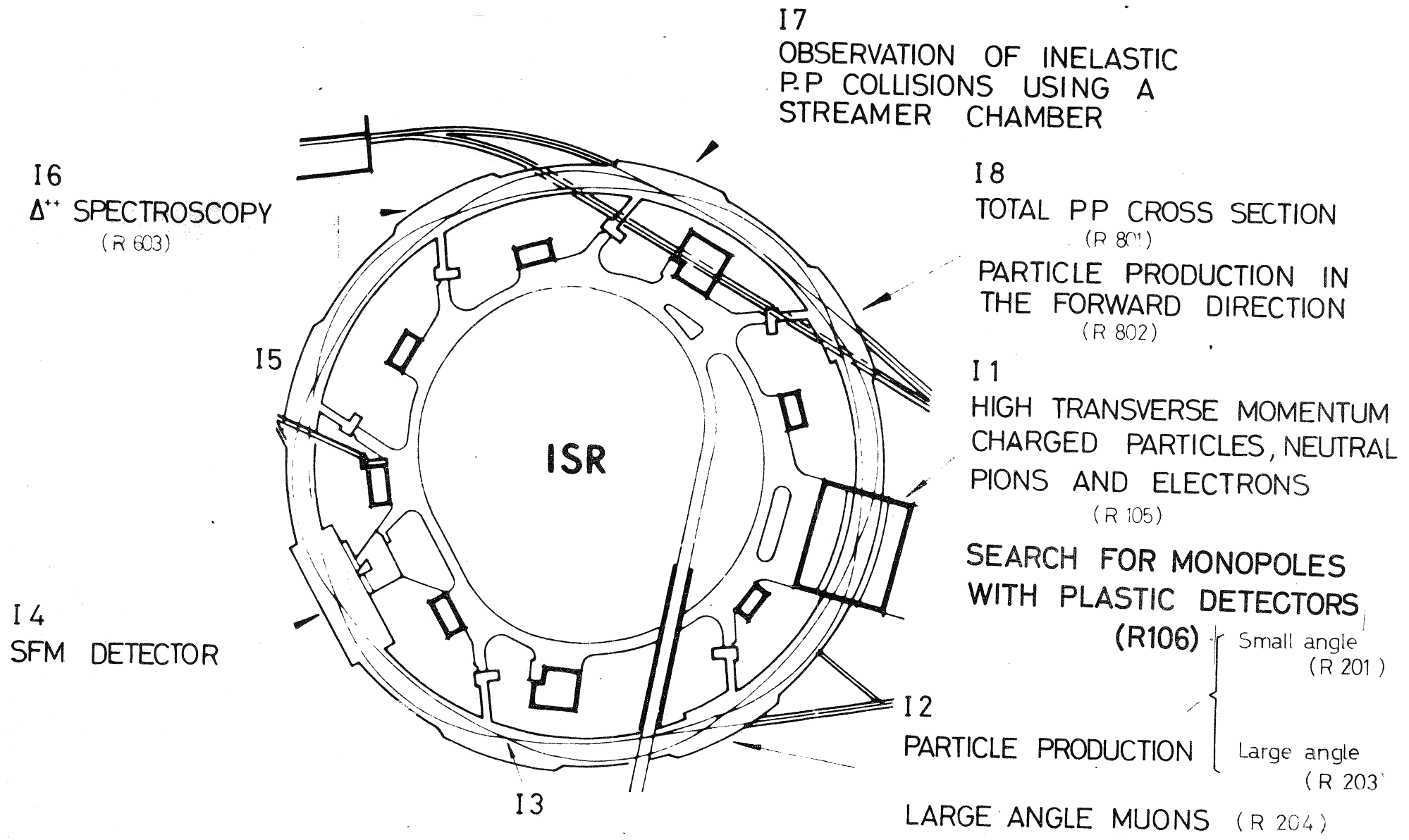
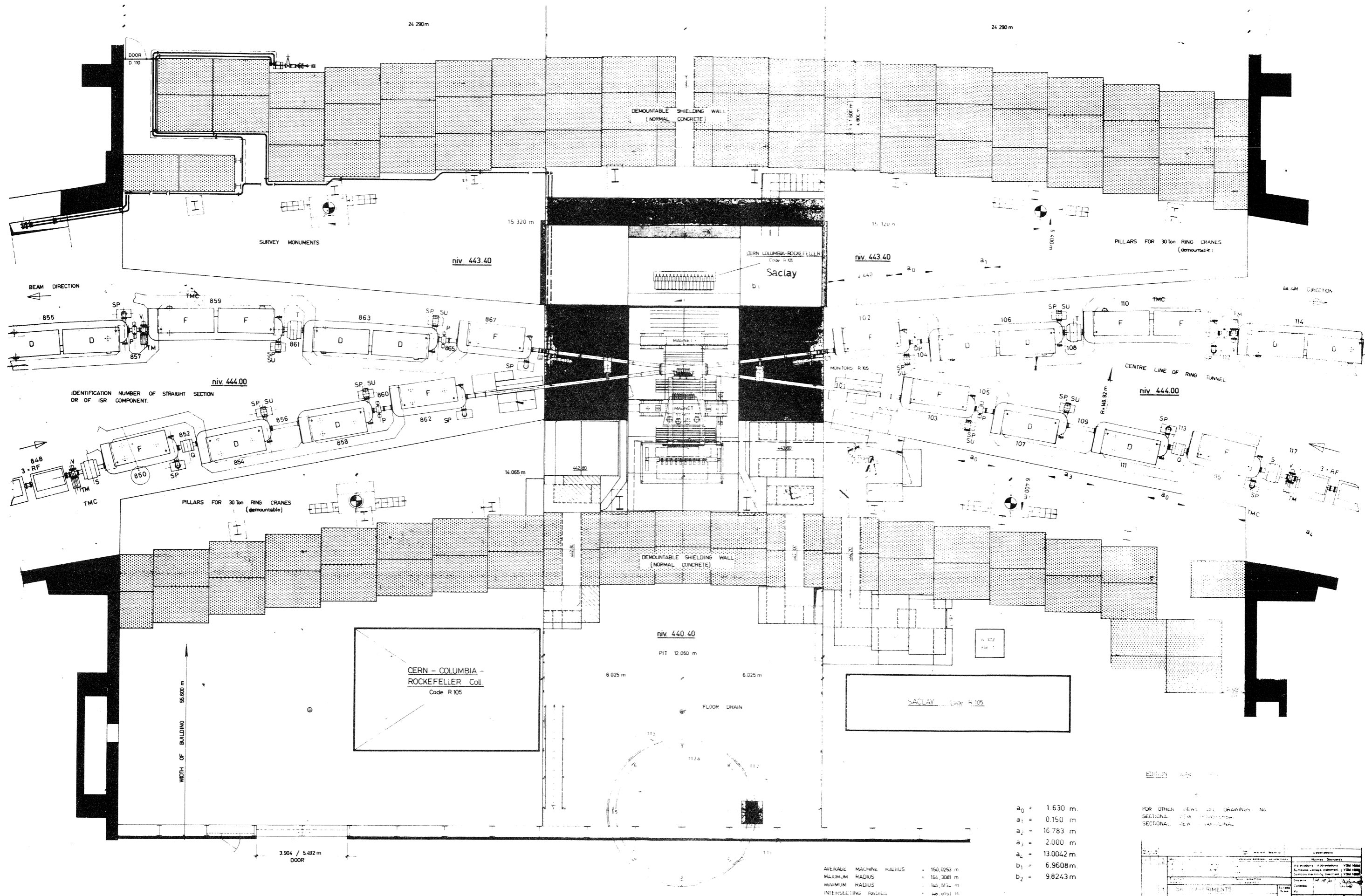


FIG. 1

ISR EXPERIMENTS

DECEMBER 1973



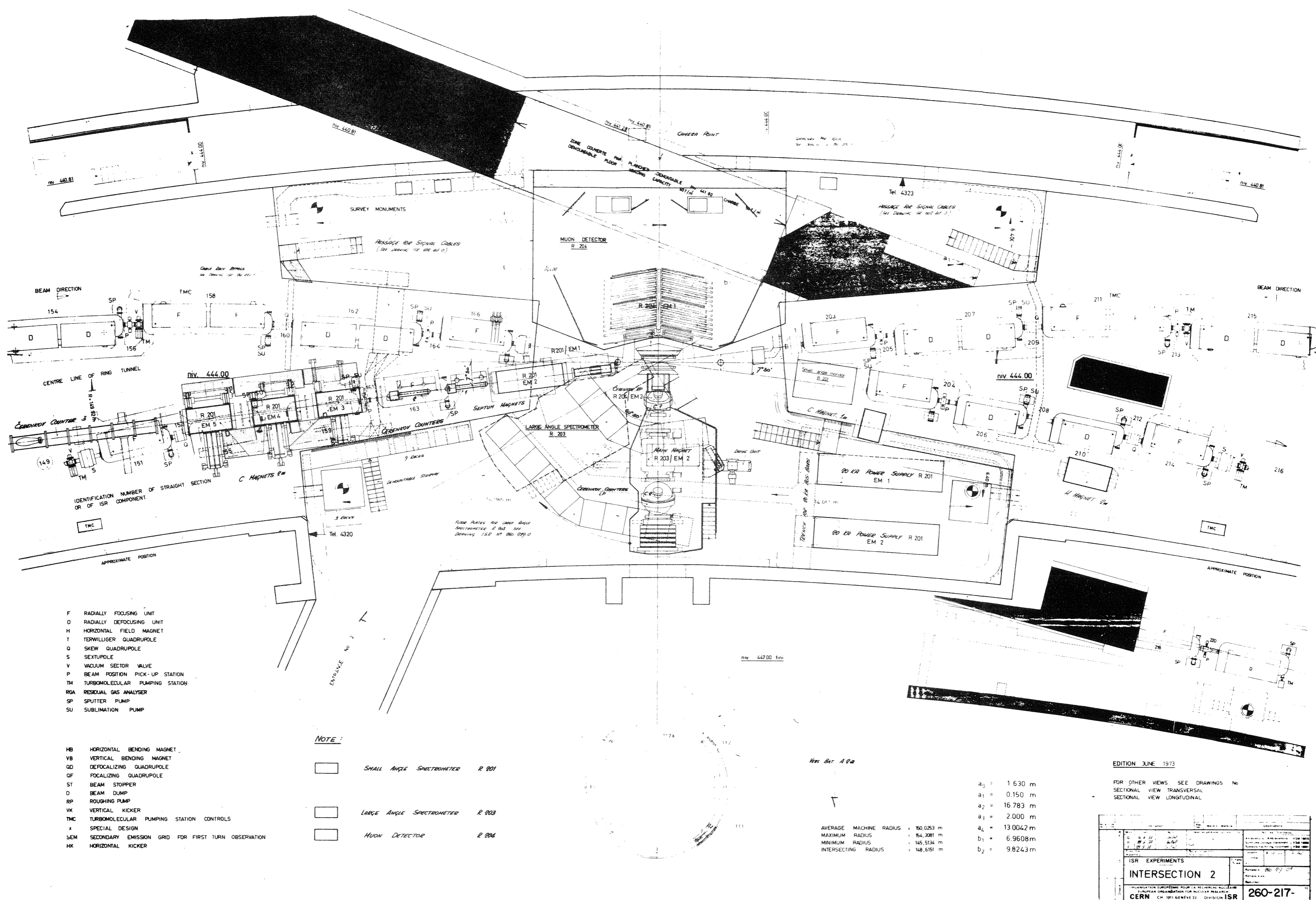
- $a_0 = 1.630 \text{ m}$
- $a_1 = 0.150 \text{ m}$
- $a_2 = 16.783 \text{ m}$
- $a_3 = 2.000 \text{ m}$
- $a_4 = 13.0042 \text{ m}$
- $b_1 = 6.9608 \text{ m}$
- $b_2 = 9.8243 \text{ m}$

AVERAGE MACHING RADIUS = 150.0253 m
 MAXIMUM RADIUS = 154.3081 m
 MINIMUM RADIUS = 145.9131 m
 INTERSECTING RADIUS = 46.0191 m

FOR OTHER VIEWS SEE DRAWINGS NO. SECTIONAL VIEW OF INTERSECTION SECTIONAL VIEW OF TUNNEL

GENERAL INFORMATION		REVISIONS	
NO.	DESCRIPTION	NO.	DESCRIPTION
1	INTERSECTION 1		
CERN - COLUMBIA - ROCKEFELLER COLLIDER		DIVISION ISR	
260-247			

FIG. 2



- F RADIALLY FOCUSING UNIT
- D RADIALLY DEFOCUSING UNIT
- H HORIZONTAL FIELD MAGNET
- T TERWILLIGER QUADRUPOLE
- Q SKEW QUADRUPOLE
- S SEXTUPOLE
- V VACUUM SECTOR VALVE
- P BEAM POSITION PICK-UP STATION
- TM TURBOMOLECULAR PUMPING STATION
- RGA RESIDUAL GAS ANALYSER
- SP SPUTTER PUMP
- SU SUBLIMATION PUMP

- HB HORIZONTAL BENDING MAGNET
- VB VERTICAL BENDING MAGNET
- QD DEFOCALIZING QUADRUPOLE
- QF FOCALIZING QUADRUPOLE
- ST BEAM STOPPER
- D BEAM DUMP
- RP ROUGHING PUMP
- VK VERTICAL KICKER
- TMC TURBOMOLECULAR PUMPING STATION CONTROLS
- X SPECIAL DESIGN
- SEM SECONDARY EMISSION GRID FOR FIRST TURN OBSERVATION
- HK HORIZONTAL KICKER

NOTE

- SMALL ANGLE SPECTROMETER R 201
- LARGE ANGLE SPECTROMETER R 203
- MUON DETECTOR R 204

See Bat. A 2a

AVERAGE MACHINE RADIUS	150.253 m
MAXIMUM RADIUS	154.3081 m
MINIMUM RADIUS	145.5134 m
INTERSECTING RADIUS	148.6151 m

a_0	1.630 m
a_1	0.150 m
a_2	16.783 m
a_3	2.000 m
a_4	13.0042 m
b_1	6.9608 m
b_2	9.8243 m

EDITION JUNE 1973

FOR OTHER VIEWS SEE DRAWINGS No
SECTIONAL VIEW TRANSVERSAL
SECTIONAL VIEW LONGITUDINAL

ISR EXPERIMENTS	
INTERSECTION 2	
ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH CERN CH-1211 GENEVE 23 DIVISION ISR	
260-217-	

FIG. 3

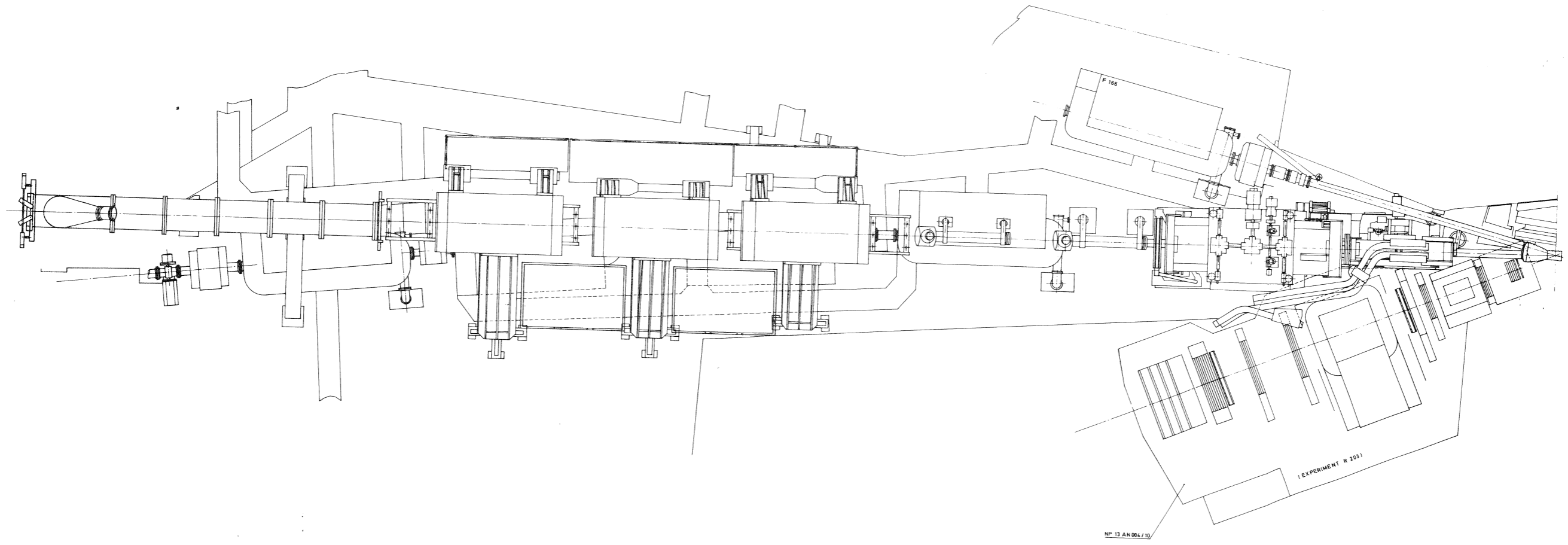
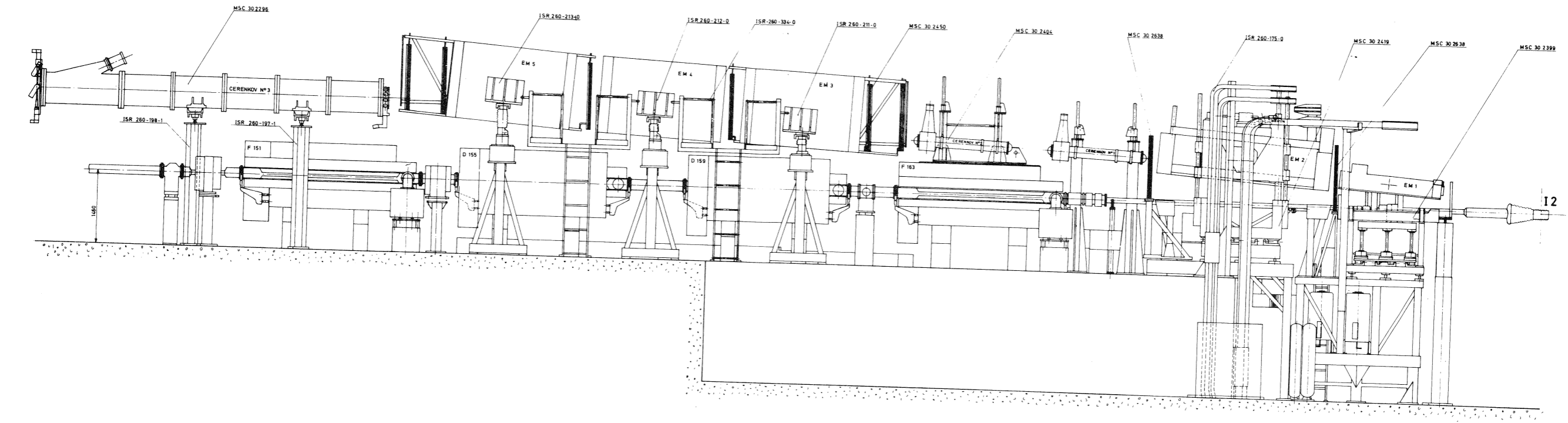
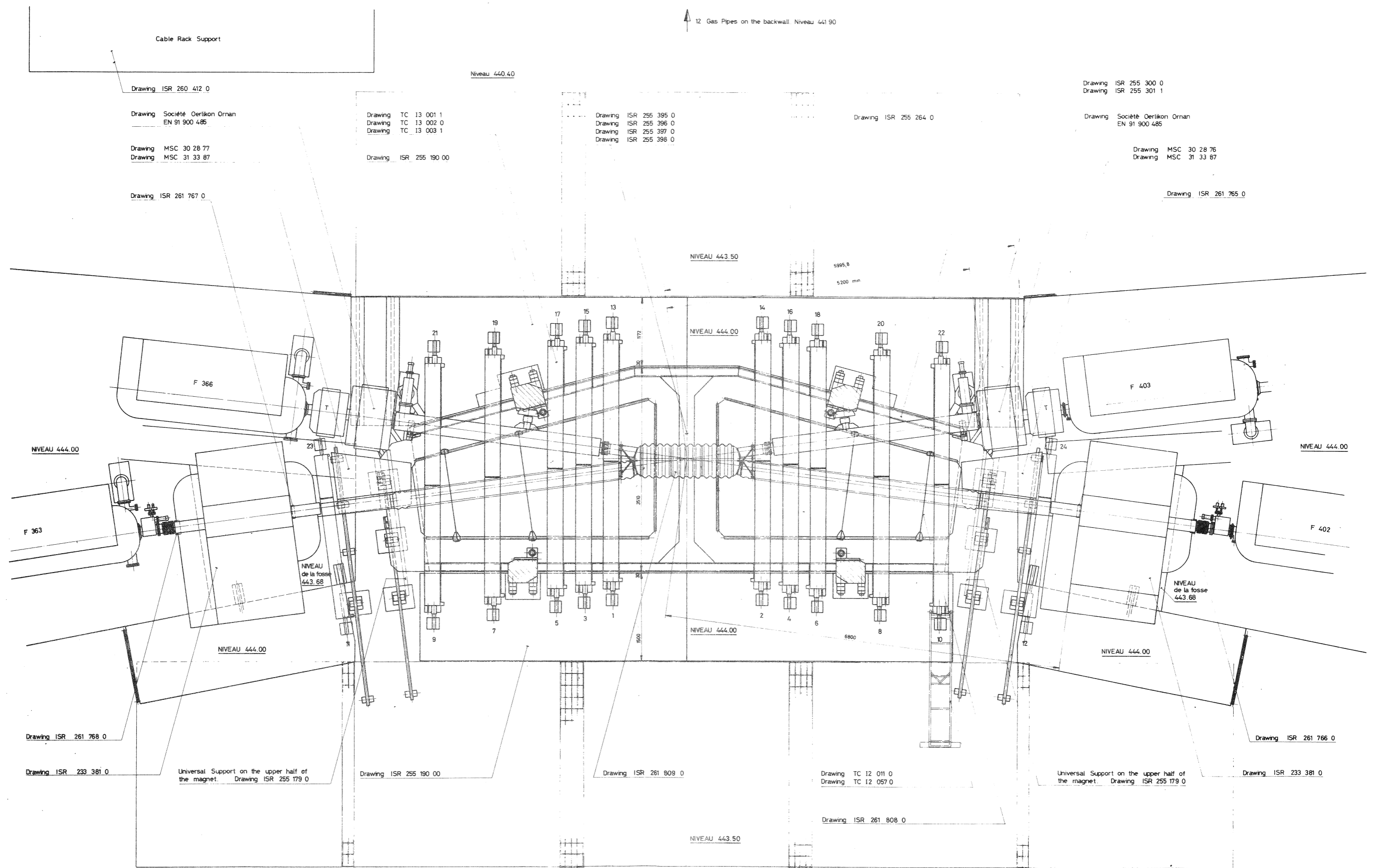


FIG. 4

12 Gas Pipes on the backwall. Niveau 441.90



Cable Rack Support
Drawing ISR 260 412 0

Drawing Société Oerlikon Ornan
EN 91 900 485
Drawing MSC 30 28 77
Drawing MSC 31 33 87

Drawing ISR 261 767 0

Drawing TC 13 001 1
Drawing TC 13 002 0
Drawing TC 13 003 1
Drawing ISR 255 190 00

Drawing ISR 255 395 0
Drawing ISR 255 396 0
Drawing ISR 255 397 0
Drawing ISR 255 398 0

Drawing ISR 255 264 0

Drawing ISR 255 300 0
Drawing ISR 255 301 1

Drawing Société Oerlikon Ornan
EN 91 900 485

Drawing MSC 30 28 76
Drawing MSC 31 33 87

Drawing ISR 261 765 0

NIVEAU 444.00

NIVEAU 443.50

NIVEAU 444.00

NIVEAU 444.00

NIVEAU 443.50

Drawing ISR 261 768 0

Drawing ISR 233 381 0

Universal Support on the upper half of the magnet. Drawing ISR 255 179 0

Drawing ISR 255 190 00

Drawing ISR 261 809 0

Drawing TC 12 011 0
Drawing TC 12 057 0

Drawing ISR 261 808 0

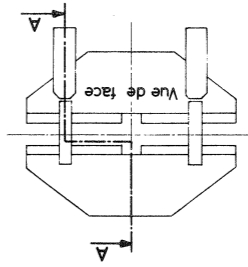
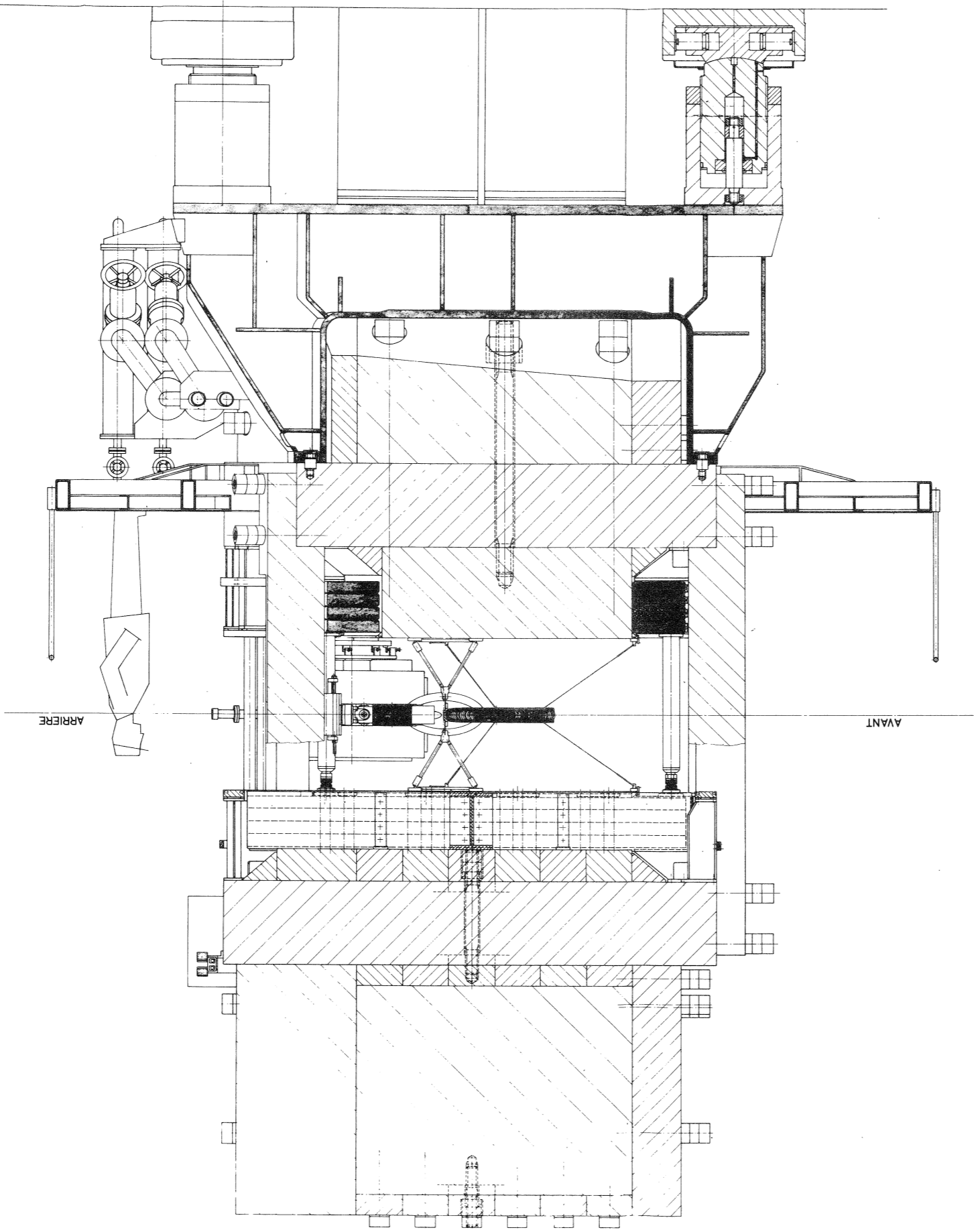
Universal Support on the upper half of the magnet. Drawing ISR 255 179 0

Drawing ISR 233 381 0

Mod A
Ajouté les numeros
ISR 261 765 0 + 261 768 0
Modifié l'emplacement des
supports ISR 255 179 0

No	Date	Description	Stat	Matériaux		Observations
				Matière	Quantité	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
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17						
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21						
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23						
24						

FIG 5



CERN CH - 1211 GENEVE 23 DIVISION ISR ORGANISATION INTERNATIONALE POUR LA RECHERCHE NUCLEAIRE INTERNATIONAL ORGANIZATION FOR NUCLEAR RESEARCH	
Coupe A-A Split field magnet	
No. de plan Drawing No.	255-396-
Date Date	1968
Dessiné par Drawn by	J. P.
Vérifié par Checked by	J. P.
Approuvé par Approved by	J. P.
Matière Material	Invar
Dimensions Dimensions	en mm in mm
Révisé par Revised by	J. P.
Date Date	1968
Approuvé par Approved by	J. P.
Matière Material	Invar
Dimensions Dimensions	en mm in mm

FIG. 6

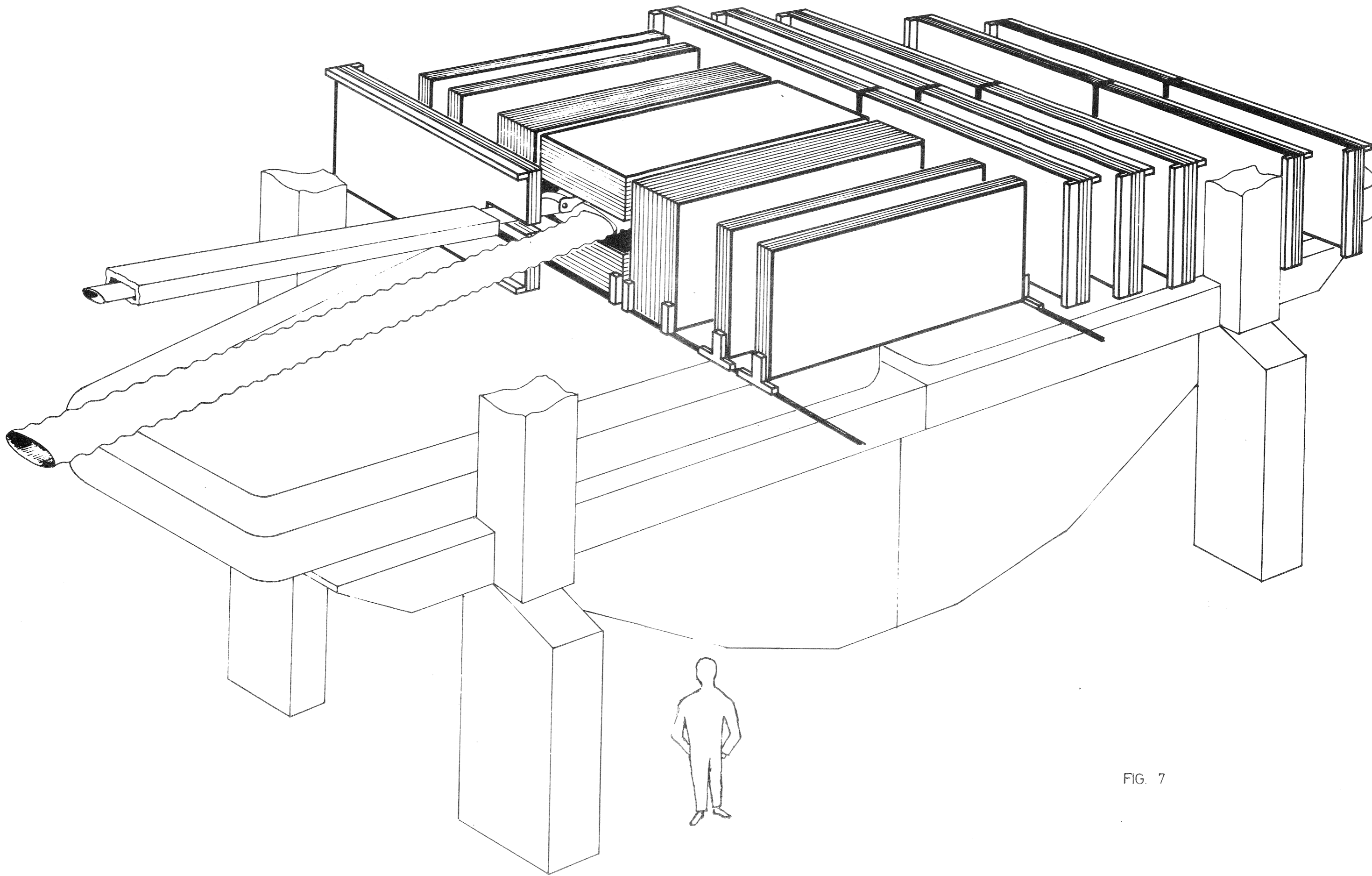
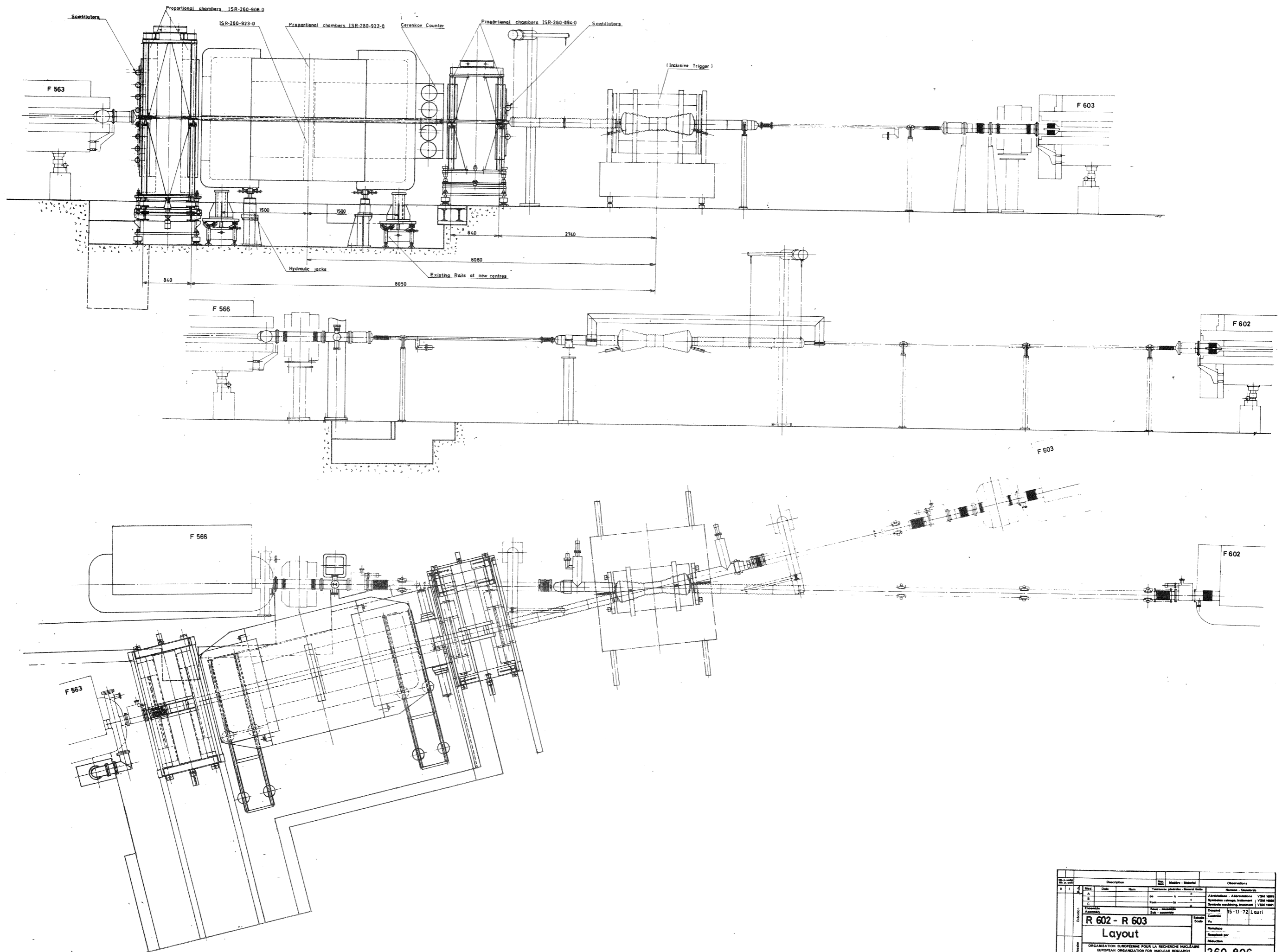
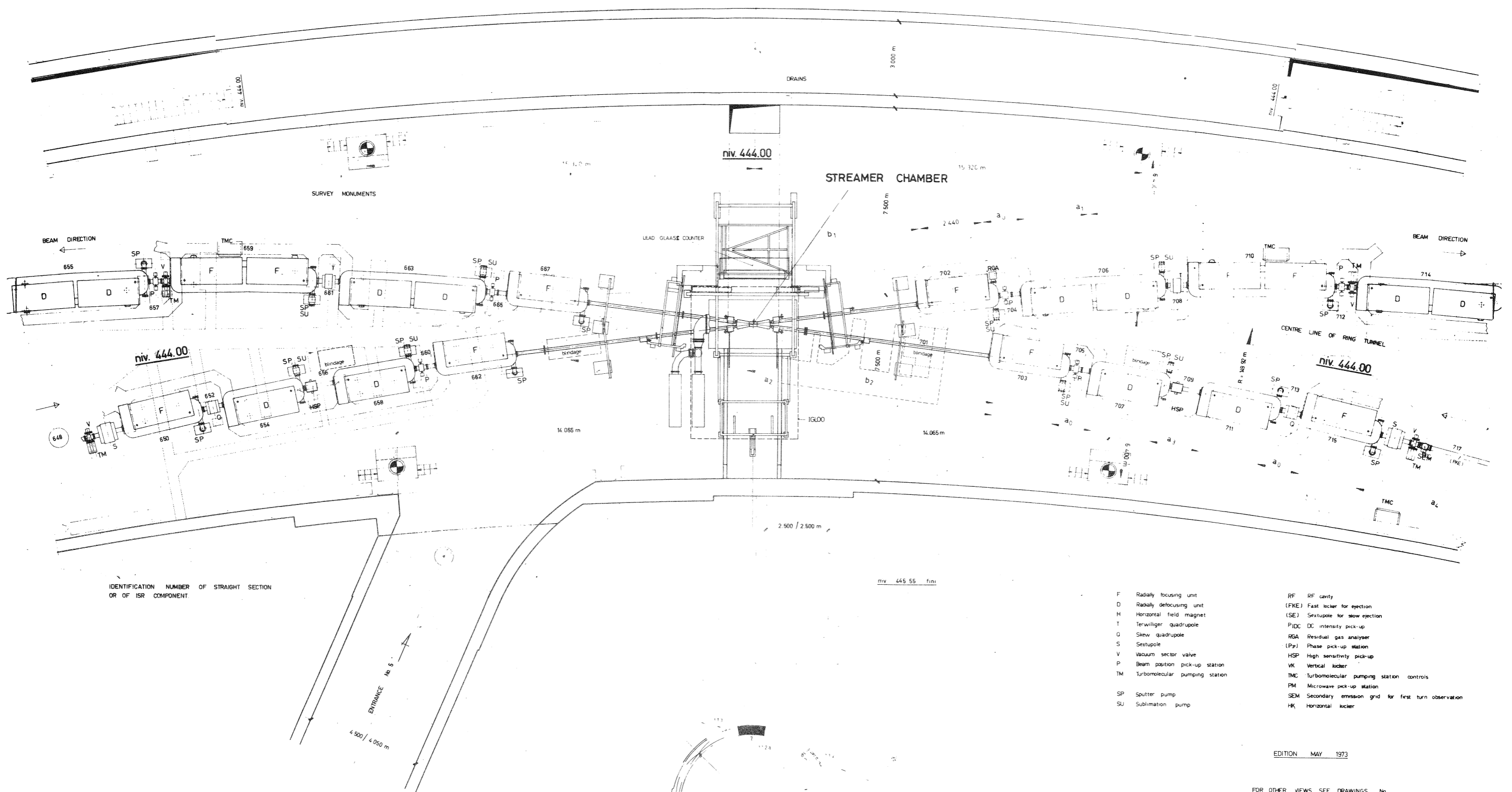


FIG. 7



Description		Matériau - Material	Observations
1	2	3	4
A	1	1	Abbréviation - Abbreviation: VSM 1001
B	1	1	Système câblage, câblage / VSM 1002
C	1	1	Système mécanique, montage / VSM 1003
Série - assembly		Drawn	Checked
Date - assembly		Scale	15-11-72 L.G.R.F.
R 602 - R 603		Layout	
ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLEAIRE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH		260-806-	
CERN CH-1211 GENEVE 23 DIVISION ISR			

FIG. 8



IDENTIFICATION NUMBER OF STRAIGHT SECTION OR OF ISR COMPONENT

- F Radially focusing unit
- D Radially defocusing unit
- H Horizontal field magnet
- T Terwilliger quadrupole
- O Skew quadrupole
- S Sextupole
- V Vacuum sector valve
- P Beam position pick-up station
- TM Turbomolecular pumping station
- SP Sputter pump
- SU Sublimation pump
- RF RF cavity
- FKE Fast kicker for ejection
- SE Sextupole for slow ejection
- PIDC DC intensity pick-up
- RGA Residual gas analyser
- Pp Phase pick-up station
- HSP High sensitivity pick-up
- VK Vertical kicker
- TMC Turbomolecular pumping station controls
- PM Microwave pick-up station
- SEM Secondary emission grid for first turn observation
- HK Horizontal kicker

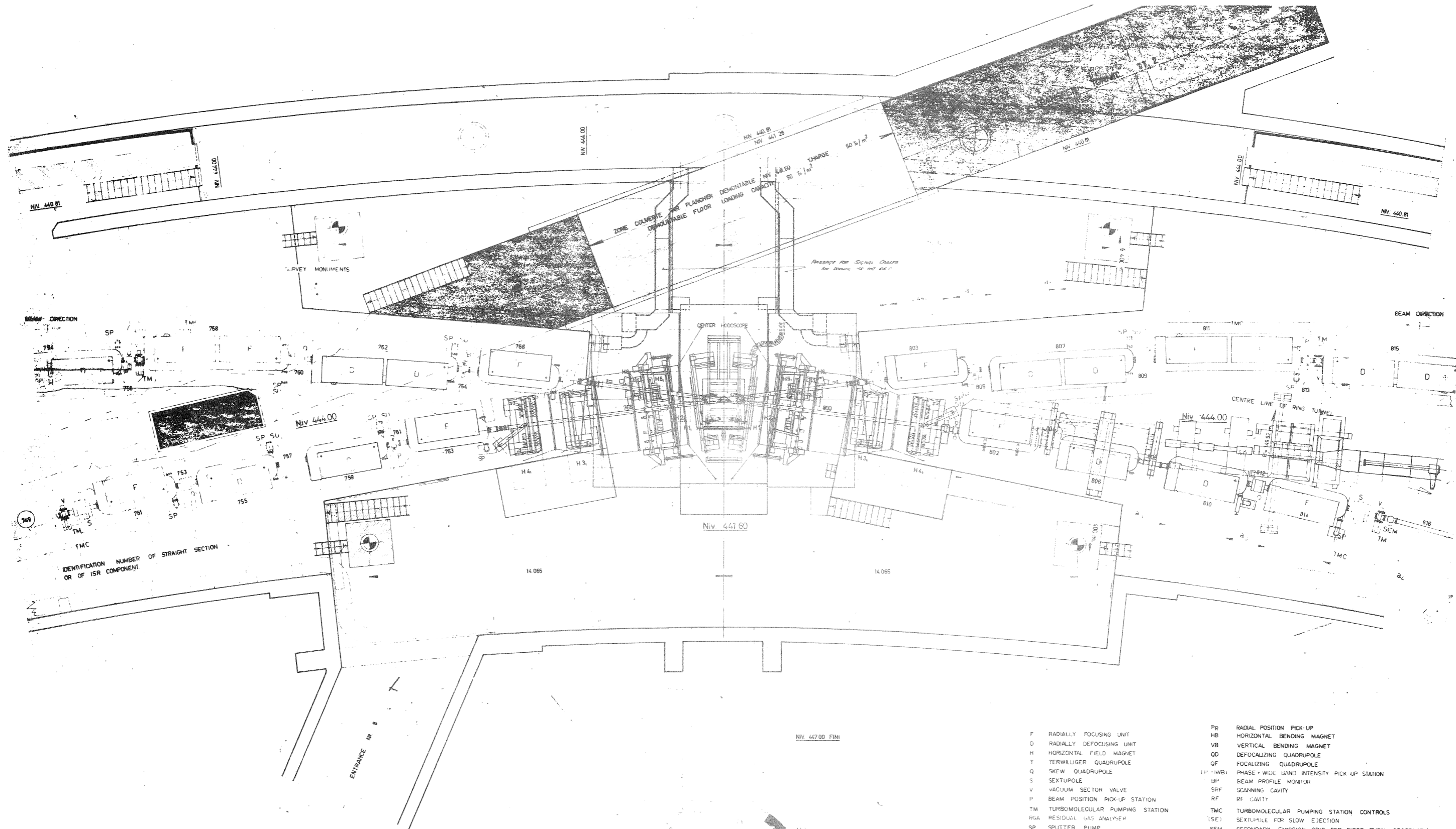
- Average machine radius = 150,023 m
- Maximum radius = 154,3081 m
- Minimum radius = 145,5134 m
- Intersecting radius = 148,6151 m
- $a_0 = 1.630$ m
- $a_1 = 0.150$ m
- $a_2 = 16.783$ m
- $a_3 = 2.000$ m
- $a_4 = 13.0042$ m
- $b_1 = 6.9608$ m
- $b_2 = 9.8743$ m

EDITION MAY 1973

FOR OTHER VIEWS SEE DRAWINGS No
SECTIONAL VIEW TRANSVERSAL 208-610-1
SECTIONAL VIEW LONGITUDINAL 208-611-0

Rev.	Date	Author	Checked	Approved	Remarks
1	6/73	6/67			
<p>ISR EXPERIMENTS</p> <p>INTERSECTION 7</p> <p>PROJECTIONS COMPLÉMENTAIRES POUR LE RECHERCHE NUCLEAIRE ORGANISATION POUR LE RECHERCHE NUCLEAIRE CERN, CH-1211 GENEVE 23, DIVISION ISR</p>					
					260-978-A

FIG. 9



IDENTIFICATION NUMBER OF STRAIGHT SECTION OR OF ISR COMPONENT

- F RADIALLY FOCUSING UNIT
- D RADIALLY DEFOCUSING UNIT
- H HORIZONTAL FIELD MAGNET
- T TERWILIGER QUADRUPOLE
- Q SKEW QUADRUPOLE
- S SEXTUPOLE
- V VACUUM SECTOR VALVE
- P BEAM POSITION PICK-UP STATION
- TM TURBOMOLECULAR PUMPING STATION
- HGA RESIDUAL GAS ANALYSER
- SP SPUTTER PUMP
- SU SUBLIMATION PUMP
- QE SPECIAL QUADRUPOLE FOR SLOW INTEGRAL EJECTION
- Pr RADIAL POSITION PICK-UP
- HB HORIZONTAL BENDING MAGNET
- VB VERTICAL BENDING MAGNET
- QD DEFOCALIZING QUADRUPOLE
- QF FOCALIZING QUADRUPOLE
- (P-WB) PHASE-WIDE BAND INTENSITY PICK-UP STATION
- BP BEAM PROFILE MONITOR
- SRF SCANNING CAVITY
- RF RF CAVITY
- TMC TURBOMOLECULAR PUMPING STATION CONTROLS
- (SE) SEXTUPOLE FOR SLOW EJECTION
- SEM SECONDARY EMISSION GRID FOR FIRST TURN OBSERVATION
- DM DAMPING MAGNET
- PS SECONDARY EMISSION PROBE SCANNER
- SP SMALL SPUTTER PUMP

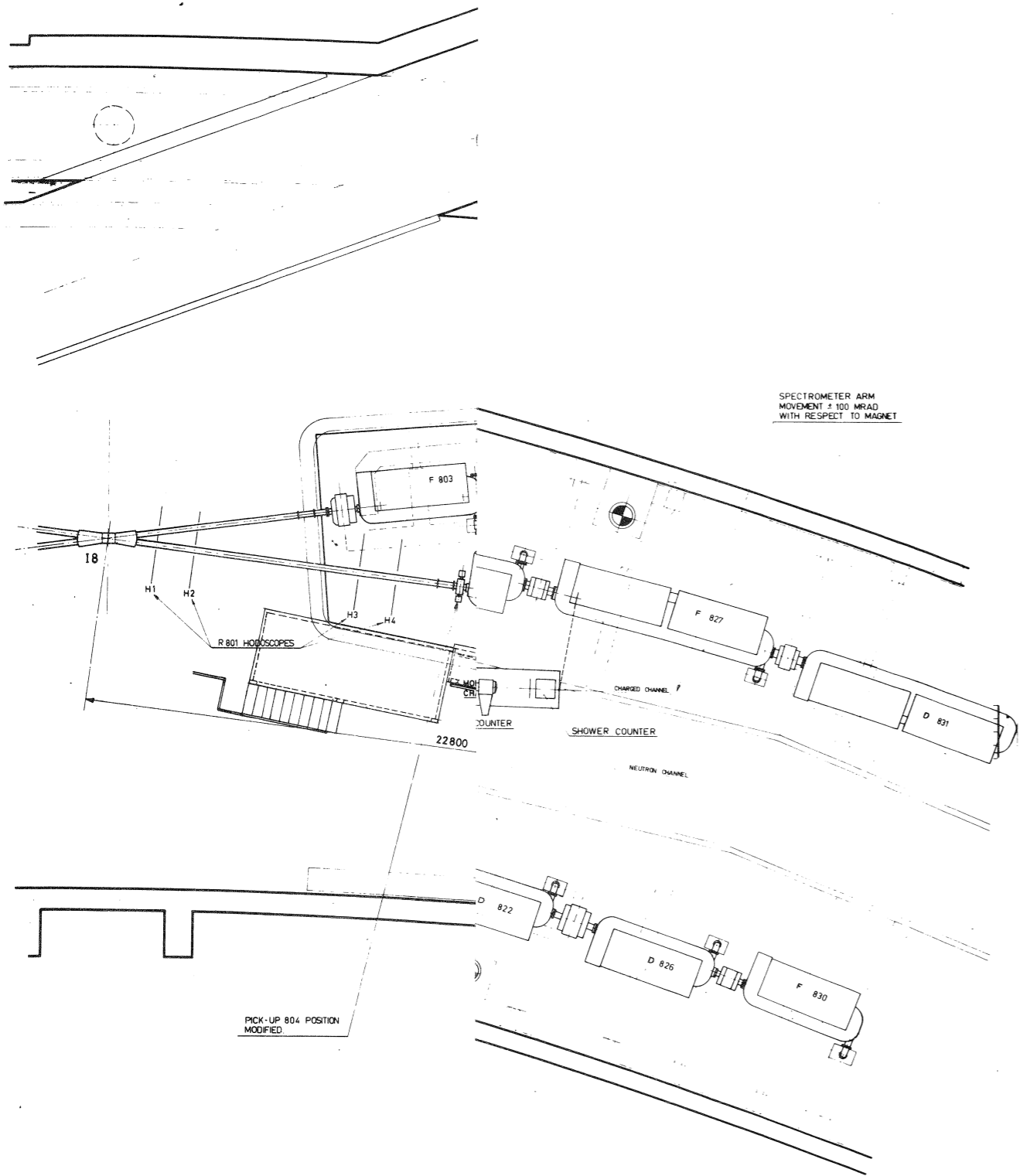
$a_1 = 1.630 \text{ m}$
 $a_2 = 0.150 \text{ m}$
 $a_3 = 16.783 \text{ m}$
 $a_4 = 2.000 \text{ m}$
 $a_5 = 13.0042 \text{ m}$
 $b_1 = 6.9608 \text{ m}$
 $b_2 = 9.8243 \text{ m}$

AVERAGE MACHINE RADIUS = 150.0253 m
 MAXIMUM RADIUS = 154.3081 m
 MINIMUM RADIUS = 145.5134 m
 INTERSECTING RADIUS = 148.6151 m

FOR OTHER VIEWS SEE DRAWINGS No.
 SECTIONAL VIEW TRANSVERSAL
 SECTIONAL VIEW LONGITUDINAL
 EDITION APRIL 1973

ISR EXPERIMENTS		260-450	
INTERSECTION 8		260-450	
CERN		DIVISION ISR	

FIG. 10



Modifications		Signatures	
is détails de R 802	Lauri		
ons des chambres	Lauri		
Passerelle	Lauri		

No. et Unité	Description	Rev.	Matériau - Material	Observations
18	Layout	1		
R 802 EXPERIMENT CERN-ROME Scale: 1/100 Date: 19.7.72 Author: L. Lauri Checked: J. P. P. P.				
ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH CERN CH-1211 GENEVE 23 DIVISION ISR 260-711-c				

FIG. 11