Jack mortland



June was a good month for Chio Track Hub Walkers hur an even better one for Air Force Captain Endy Halusa. The ONV started by sweeping five of the first ris places in the Chio AAU One Mile and thun teek a strong second in the National 10 Kile and third in the National 10 Kile team championships. In both these races Halusa scored decisive wins to lead the SC Striders to team titles and clearly establish himself as the nation's current top race walker. Following are descriptions of these three races in order of importance, which happens to be reverse chronologic order.

SUMMY SEE 2016

Meksosport, Pa., June 18-Budy Halusa collected, his second national walking title

McKeosport, Pa., June 18-Budy Halusa collected his second national walking title in less than a week as he stepped away from a strong field to win the Senior 20 kilo today at Eastland Shopping Plaza. As in the 165kilo in Chicago last week Halusa was slowed considerable by the heat, but he still proved himself to be well ahead of other US walkers.

It was not a question of humidity today, as in Chicago, but a hot blazing sum reflecting of the asphalt surface and absolutely no shade on the course. Despite slowing considerably in the latter stages Budy still turned in a fine 1:36:16 on the 13 lap course that included two reasonably tough hills.

In the team picture Haluza led his Southern California Striders teamates to victory, despite disqualification of their number two man Dem DeMoon, who was walking second at the time. The Striders had 15, to 18 for the NIAC and 25 for the OTC.

Once again DeNoon bolted into the lead and at one point around two miles had better than 100 yards on Haluga. DeNoon was under neven for the first mile which proved to be much too fast on a day such as this one. Haluga meanwhile, walked a more steady, sensible pase and by the end of fant laps overhauled the tiring DeNoon. Den had received a warring during his early sport and was called out around eight miles, new over a minute behind Haluga.

From there Heluza was never challenged for the leaf of wound up 1:32 should of second place for Laird, the defending sharpies. Taird was never in contention for the leaf, but at the same time was never seriously challenged for second after DeNoon dropped out. He fully redected his rotten showing in Chicago and showed no effects of his groin injury during the race, but was helding semeshat afterward.

Mearly three minutes back of laird, Jack Mortland just hung on for third as a closing rush by Non Daniel fell a few strides short. The related Mortland didn't know Daniel was close until he heard a big dry heave in his ear about two strides past the finish line and there was Daniel, supposedly a half minute behind. Mortland moved from tenth at the mile into a rece with Daniel and Bob Mitchen at around three miles for fourth place. A sport on the seventh mile broke Mortland free ujutil Daniels strong finish.

Mosmobile, Kitchen, the young Chesspeake TC walker was the real surprise of the race. Last year, at 18, he promoted this same championship race in Baltimore, and did a swell job of it, but a lousy job of walking. This year he came to walk ami did a swell job of that. He appeared to be fading when Mortland cought him at three miles but hung on doggedly as the two of them caught Daziel and for three laps after that. He never did fold and finished a very strong fifth in far and many his finest race to date. He is certainly one to be watched in the future.

In sixth was the Strider's Bob Bomman, who felt the pressure of the team battle after DeMoon's DQ and pulled away from Jack Elackburn on the final lap to a narrow wine second margin. Elackburn, who is trained for a good four mile and can hang on pretty well for cix, hung on real well for the full distance and even escaped without injury. In eighth was the Strider's premising newcomen, larry Yeung, who started with Haluss and laird, faded very fast and them rallied to hang on well at the end. Paul Schell welked his usual steady race in minth and Earl Johanson showed some of his premise in tenth. For the OFC Chuck Newell continued to improve with his best ever 20 kilo in 19th place and Dale Arrold walked his best race of the year, breeking two hours in 25th. Dec Elackburg was too busy judging to walk.

Traffic on the course was extremely well handled. The race was held on a Saturday afternoon at alway shopping center and this could have been a problem. The hills on the course made it interesting and challenging but the lack of shade main was a drawback and I feel it was slightly long for which statement I have some backup. The lap was measured at exactly 5000 feet according to the entry blank. Thus the 13 laps would equal 65000 feet, which is 616 feet short of 20 kilo, or just over 200 yards. However the extra distunce walked at the start took about two minutes which would be over a quarter mile at the initial pace. Also, my average lap time after the first lap and a fraction, which would have been faster, was 7:36.2. At 5000 feet laps this figures to 8:01.75 miles or 1:39:47.1 for 20 kilo. With the time I picked up on the first lap this would probably come down to about 1:39:40 or one misute faster than I walked which is about the same difference I have shown above for the fraction of a lap. Therefore I submit that either their lap actually measured scrething less than 5000 feet or we walked 200-300 yards over 20 kilo which is getting sort of picayunish on my part.

Mollowing are lap time for several of the walkers which serve to show the progress of the race and who folded when. The times start at the end of the account full lap. The fractional part of a lap had also been walked at this time. Malana-15:1/7, 22:52, 29:30, 36:57, 44:05, 31:18, 58:28, 65:51, 73:19, 80:1/7, 88:28 Molloca-15:10, 22:15, 29:26, 36:57, 44:26, 51:58, 59:32, cat indeed-15:10, 23:10, 30:1, 37:1/3, 45:00, 52:16, 59:32, 66:50, 74:19, 81:52, 89:28 Molloca-16:1/5, 24:10, 31:35, 39:05, 46:35, 53:50, 61:30, 69:10, 76:50, 84:32, 2:33 Molloca-16:1/5, 24:10, 31:35, 39:50, 47:36, 55:20, 63:06, 71:05, 79:15, 87:20, 96:11 and 1 , 25:1/5, 34:00, 42:25, 50:1/8, 59:07, 67:23, 75:50 84:38, 94:00, 1 , 28:53, 37:50, 46:45, 55:28, 64:22, 73:15, 82:21, 91:1/2

Thanks to Marty Mortland for the less times. How sweet the is. There was one other disqualification, that of hex Gould of the Gladstone AC who was saught off in the final stretch. Several varnings were given including one to Habasa in the later stages of the race when he was tiring. The complete results follow.

1. Maluza, Striders 1:36:16 2, Laird, NYAG 1:37:48 3. Mostland, OTO 1:40:40 4. Cantel, MIAC 1:40:45 5 Kitchen, Chosapeake TC 1:42:06 6. Bassen, Scridere, 1:44:06 7. Elackburn, OTC 1:44:15 S. Zoung, Striders 1:45:58 9. Schell, North Medford Club 1:46:50 10. Johanson, Pitt. Welkers Asen 1:48:12 11. Earl Morschenz Cladstone AC 1:49:02 12. John Kelly, Millrose AA 1:49:15 13. Bill Cheltchenko, MY Pioneer Chab 1:49:45 14. Bruce MacDonald, MYAC 1:50:03 15. Bill Barney. Someon State 1:50:05 16. Shani Ladany, NY Pioneer 1:50:11 17. Jim Hanley, Striders 1:50:21 18. Dr. John Shilling, NY Pionesr 1:51:16 19. Chuck Devoll, OTC 1:51:20 20. Bill Reiser, Chesapeaks TC 1:53:01 Zi. Rich Bowman, Um. 1:53:02 22. Harold Japobsen, un. 1:53:28 23. Joe Stefunowicz, Phil. AC 1:56:39 24. Dale Arnold, OTC 1:50:53 25, Harold Hoffman, Gladstone AC 2:00:38 26. John McDonald, Phis. AC 2:00:52 27. William Hackulich, Phil. AC 2:01:09 28. Bert Life, Gladstone AC 2:02:01 29. Roger Dusen, SCVIV 2:03:04 30. Ray Leach, Phil. AC 2:03:13 31. Paul Walkovie, Pail, AG 2:05:05 32, James Deni, Pitt, Walkers 2:05:32 33, Joel Holman, Chossyceke TC 2:06:48 34. Joe Casillo, Pitt. Walkers 2:10:14 35. Frank Johnson, Gladstons AC 2:11:43 36. Mike Horan, Fitt, Walkers 2:12:37 37. Lou Meishloss, Phil. AC 2:12:43 38. James Johnson, Pitt. Walkers 2:23:13 39. Mike Dyographak, Pitt. Walkers 2:28:39 40. Anthony Kostish, us. 2:30:00 41. From Walsh, Pitt. Welkers 2:31:02 42. Steve Semick, Pitt. Walkers 2:31:30 Teams: Striders-15, NYAG-18, OFG-25, Pioneer Club-38, Chesapeake TG-44, Gladstone AC-49, Pittsburgh Walkers-55, Philadelphia AC-56.

Publisherin comments on the race: I think we should have a Mrs. Racovillers Combast snong race walking wives. Mayy Jo would quite naturally win byt the next few places are wide open. (Ed. Harumphi)

The field was a tough one with all contenders present at the starting line on this sunny day. I liked the asphalt course owen with its gradual bills and no shade, Knowing both mong it is hard to imagine a more unlikely twocome riding around judging a race together than Doc Mackburn and Charlie Silcock, Laybe because opposites attract? Or is it because they are both characters?

Rady looked very strong even though be appeared to tire slightly on the last tile. The big surprise of the race was Bob Kitchen. He walked a very steady and jutury race. Larry Young started out too fast but recovered sufficiently to turn in a very fine performance. AO kilo champ Paul Schell walked very even pace to gain on the leaders in the last three miles.

Steamy Stage

Chirage June 12-As usual the big winher in the Mational 10 kild race walk to the relater absence we have come to expect in Stays Field. But Boundary the limit been rendering for years why the times were always so slow in this race. The part he journeyed east and now he knows first hand. Althought the temperto will this it municity was extremely high as usual. As a result, everyone and a commission even those Rudy Malura, in the bost of the life, and the bost of the life,

Fastest man onthe track at the finish was the fat man himself, Jack Blackburn, who should have been a guddle of lard. Blackburn "poured it on" the last three laps (5:55) to pull away from OTC teamete Jack Mortland for third place. This, tegether with Chack Mewell's 14th place, brought the OTC a much cherished victory over the NYAC, but only for second behind the SC Striders. With Heluna first and Don DeMoën assord, the Striders were unbeatable.

As usual DeMoon shot into the lead and covered the first mile in 6:53. Halusa was not too far back in 7:03. Ron laird was third and Larry Young and Hon Daniel in a tight dual for fourth. Halusa and DeMoon had both hoped to walk seven minute miles, but anyone who has walked in the Stagg Field oven before could have told thom they were cut of their minds. DeMoon had alowed to 14:10 by two miles and Halusa was breathing on his neck. The next three places were unchanged.

Meanwhile, Mortland and Blackburn were moving up. Mortland had hoped to carry 7:30 miles and forget about the fact early pace, hoping the obsers would fold and come back. However he managed only a 7:33 first mile and soon folded along with everyone else. Elackburn's race plan was to hang onto Mortland for as long as possible, which he managed until those last three lass, after which he couldn't go that slow anymers.

By three miles Haluns was in front of a sagging DeNoos, Laivi was still third and the Mortland-Blackburn tandem was passing Daniel and Young, who were still bettling it out. By Li miles they overhauled Laird, passed without challenge and from there things remained unchanged except for Blackburn's spurt as Daniel was slowly inching away from Young over the last two miles.

Haluse's 46:53.6 was better than two minutes off his time on the way to 10 miles immunistance weeks ago but was still only 18.2 seconds off Ron Zinn's Stagg Field and championship set in 1963. DonDeNcon, despite losing a lot of ground to Halusa over the last three miles was much stronger than in the past and was never challenged for second. Ron aird walked his usual rotten Chicago race, far below his capability, but did improve one place from last year. Larry Young showed his fine potential, but like all the West Coast walkers feded badly in the hamidity. The conditions probably served as a leveling factor for Blackburn and Hortland as they are training in this type weather and are somewhat acclimated. Even whom acclimated though it definitely slows one down as witness Mortland being one full minute slower than two weeks previously despite a better track and better competition today.

Recults: 1. Rudy Haluza, Striders 46:51.6 2. Don DeNoon, Striders, 47:42.3 3. Jank Elackburn, OTC 48:29 4. Jack Mortland, OTC 48:38 5. Rom Laird, NYAC 49:32 6. Rom Daniel, NYAC 50:05 7. Larry Young, Striders 50:15 8. Matt Rutyna, Green & Gold AC 51:35 9. Bob Bowman, Striders 52:08 10. Kerl Johanson, un 52:45 11. Jim Glinton, UCTC 53:15 12. Bruce MacDonald, NYAC 53:55 13. Jim Hanley, Striders 54:30 14. Chuck Newell, OTC 54:30 15. Dan Calef, UCTC 55:48 16. Bub Gray, UCTC 55:52 17. Rich Bowman, un 56:47 18. Willy Tillman, Palm Spring TC 56:57 19. Bale Arnold, OTC 57:40 20. Larry Larsen, Milmankee TC 57:46 21. Harry Larsen, Un. 57:45 22. Steve Seedek, un, out at time limit.

Thought the times were slower than I had expected & For a race of this distance I thought everyone's style was exceptionally clear. Newcomers Toung and Johanson their practice.

A lively debate took place at the McCarthy pad after the race. Unfortunately the tape recorder in my hollow Mational Medal went on the blink and we can't prove a think that was said. Everyone parted friends even though no one changed anyone's mind about anything. Betty McCarthy supplied 20 gallons or soigt lemonade.

OHIO AAU MILE

Dayton, Ohio, June h-Clair Duckham, Doc Mackburn, Wayne Yarcho, Jack Mortland, Jack Blackburn, Daile Arnold and Chouk Nevell tood the starting line in the annual Ohio AAU Track & Field Most for the one mile walk. Before the start of the race the announcer introduced Doc Blackburn as son of Jack which drew a chuckle from the other starters. At the gun the walkers drew a chuckle from the starter, but only slight this year in comparison to the past.

Jack Mackburn took the lead at the first turn and was followed through a 1:41 quarter by Mortland and Newell. The cirder track was in fair to good chare and the half mile was passed in 3:25 in the same order. The surprising Newell hung onto Mortland for 22 laps before slacking off following a warning.

At the 3/4 mark Elackburn had eased to a 15 yard lead in 5:08. The last quarter caw the leader accelerate slightly while Mortland slowed a little. Yarcho walked an even pace by himself after the 660 mark, while Arnold started a little too fast and had to gut it out to fight off a fast closing Doc Elackburz for 5th place. Duckham, one of Chic's top distance cyclists and a finisher is this year's Ela Marathon, rounded out the finishers in a very remarkable performance when you consider that just a few days before he was stopped doed from about 20 mph when he hit a cable on his bicycle. The average 60-year old grandfather wouldn't have lived through it, let alone race within a week.

Results: 1. Jack Blackburn, OTC 6:50.3 2. Jack Mortland, OTC 6:58.7 3. Chack Newell, OTC 7:23 4. Wayne Yarcho, Dayton AC 7:48 5. Dale Arnold, OTC 8:12 6. Dec Blackburn, OTC 8:15 7. Clair Duckbarn, Dayton AC 8:47

MORT DISPROVES CROMWELL THEORY

Chicago, May 25-Jack Mortland of the Chio Track Club early won the first Eom Zinn Memorial 10 Kilo Walking Race at the Hansen Park track today. The race was held between games of a scocer doubleheader and was enthusiastically received by the soccer fans.

Folish Olympian Matt Rutyna, of the host Green & Gold AC, degged Mortland's hosts for the first two miles but then gradually dropped back to finish a half-lay behind. Mortland recorded his best over track 10 kile with 47:38.2. His pass twice only slightly from 7:40 miles throughout with his first mile in 7:36, his little in 7:36 and the slowest in 7:45 (the second mile).

Hon Zinn's mother was on hand for pre-race coremonies honoring the memory it is not not present to present the awards after the race. The were in the least of placeurs with Zinn's picture on them.

The track was rather dusty and loose and a stiff breeze hampered the walkers on the backstrotch but thetemperature was near perfect in the Low 60's. Rutyna is coming back after an operation last summer and walked a fine race off only a few weeks serious training. Jim Clinton walked a steady race in third and should be a definite contender in the longer distances. Chuck Newell had been sick all week and was even sicker after the race so his fourth place effort was good under the conditions.

Results: 1. Mortland, OTC 47:38,2 2. Rutyna, Green & Gold 48:39 3. Jim Clinton, UCTC 51:40 A. Chuck Newell, OTC 56:27.2 5. Harry Epstein, un. 57:42 6. Larry Larsen, Milwaukee TC 58:02 7. Dale Arnold, OTC60:02 8. Sheldon Staubitz, Green & Gold 65:07 9. Larry Schwartz, un 65:47 10. Comrad Weis, GAC 68:42 Team-OFC .- 8, Green & Gold - 13 SECRETARIO DE CONTRACTOR DE CO

LUZAS FRUSTRAT

In perhaps the finest race walking performance ever by an American, Rudy Haluza walked a 10 mile in 1:12:38,2 on the track in San Diego on May 22. We have no details on the race other than the mile splits and the fact that Rom Laird was second in 1:16:15.0. However, as seems to be the usual thing anymore in that area, there will be no records as there was no sanction. This is the third race I remember this year out there in which records have been broken but either there is no sanction or not enough judges, which seems a little ridiculous right under the eyes of the mational chairman. Goo, at least we get sanctions even with our lousy attitude.

Anyway it's unfortunate for Rudy as he broke records from A miles on and deserves to have them. He averaged 7:10 over the first seven miles and then slowed to a 7:30 sverage for the last three. The might I called him about this. Blackburn was all elated over a 29:15 four mile that day until I reperted Rudy's 28:25 on the way to 10. Mile splits were: 7:03, 14:06, 21:10, 28:25, 35:35, 42:48 (44:32 10K), 50:09, 57:35, 65:06, 72:38.2. No splits for Laird.

Got several lecters this month. One very lengthy from C. McCarthy in reply to C. Silcock's letter of last month. Fortunately we don't have space for it this month. Chris certainly minces no words and we agree with most of what he says as it agrees with and empands upon much of what we said. But at the same time it gets a bit too personal at times which we tried to avoid and will continue to do so. However, as we get space in the future we may use excepts from this fine piece of writing where they might reenforce our views.

Also heard from Bob Bowman and Karl Johanson but seem to have misplaced the letters, but bahly wouldn't have room for them anyway. Both sort of agreed and disagreed wit.. us. Bob feels Charlie was a little off base in his reply and had completely misinterpreted our intent, with which we agree. But Bok feels that race walking can rival baseball in the eyes of the American public if wanted properly promoted. Bruce MacDonald also expressed this view in a conversation. They are of course entitled to their silly views. Not that we carry any banners for baseball, which is the cilliest thing going, but we aren't the general stupid public. Also heard from Mark Achen, we still have the letter and if we have some room left may even give it an airing.

THE PERSON OF TH The Chio Race Walker comes to you monthly from those two anti-wall-ra Jack Blackburn, publisher, and Jack Mortland, editor. Address correspondent to 3184 Summitt St., Columbus, Chic 43202, which happens to be Mortland's address. If you think you owe us a \$1.20 for another year send it along. We don't keep records. Part of our generally slowy attitude.



RED BLOOD CELLS AND EXERCISE

by Dr. John Elackburn

(Another in a series of outstanding articles on the physiology of walking. Our noted expert is now a contributor to a forthcoming volume on Sports Medicine published by some big house like McGraw-Hill or someone.)

Now about some basic facts on the red blood cells and their relation to exercise

As you may know there are approximately five million red blood cells per cubic inch in men at rest. But after fairly mild exercise the numbers increase from five to eight percent. This is strictly a transient affair because within an hour or two after exercise the count will have returned to nearly normal.

This is an energently mechanism to increase the caygen carrying capacity of the blood at a ti o when the caygen needs of the body are increased. Pretty great isn't it!

There is a reserve of blood stored in the spless which can amount to as much as 6 to 8 owners. On demand this is shunted into the main circulation or with-draws according to need. There is also a fluid shift whereby water leaves the blood for the tissues indirectly increasing the numbers of circulating red blood cells.

In prolonged exercise such as a two hours plus race, the increase is red blood cells will gradually diminish due to their destruction. Breakdown products of hemoglobin being found in the blood plasma and urine. Mormelly inactive persons undertaking unaccustomed exercise can actually cause anemic which may last neveral works.

The physically trained individual will destroy an equal amount of red blood cells, but his bone marrow is so developed that within a day or so his blood call count has returned to normal. This is why it is important to rest at least 48 hours before some of the longer races, especially when in the midst of a graelling training period. MAAU Two Mile, New York, June 26-1. Ron Laird, NYAC 13:52.6 2. Don DeMoon, Striders 14:07.8 3. 3. Ron Daniel, NYAC 14:29.8 4. Larry Young, Stridery 14:53.2 5. Dick Orbit. Stridero 14:58.8 6. Bill Caeltchenko, Pioneer Club 15:11.8 7. Bob Bowman. Striders 15:12.6 8. George Shilling, Pioneer Club 15:20.4 No further details at this point. It was not and humid though as it has been here in Chic. Daily 90 to 95 degrees with humidity from 60 percent on up to infinity. Mostly the latter. Baby, Chicago was cool, man, cool. MANU dr. 15 Kilo, Fortland, Oregon, May 29-1, Will Millman, Palm Springs TC 1:25:01 2. Mark Achen, Scattle 1:25:02 (Would you believe close) 3. George Edwards, Scattle Clympic Club 1:29:05 4. Bob Long, Striders 1:30:36 5. Ken Fowler, Beaverton, Oro. 1:33:01 6. Lerry O'Neill, Glacier Sports Club (Montana) 1:34:56 7. John Neville, Seattle OC 1:36:31 8. Roward Austin, Glacier Sports Club 1:37:26 9. Don Jacobs, Tigard, Ore. 1:38:33 10. James Olest, Glacier Sporte Club 1:49:44.

Fall. AC 30 Kilo, May 22-1. Paul Schell, North Medford Club 2:42:26 2. John Telly, Millrose AA 2:46:36 3. Bill Cashichenko, Pioneer Club 2:52:20 4. Bruco MacDonald, MIAC 2:53:25 5. Sheul Ledeny, Pioneer Club 2:55:19

10 Mile Nat Ock Memorial Hamileap, New York, May 15-Won by Merris Fleischer of New York in 1:15:00 with a 23 minute handleap. Fast time Alax Oakley, Oshaws TC (Can) 1:23:15 in 11th place. George and John Shilling next with 1:25:37 and 1:25:29. Stove Relsan of North Medford 1:25:46. Ron Damiel DC'd.

Various New England races:
Short 2 mile on open field at Holyoke, Mass, May 30 — 1. Paul Scholl 14:06
2. Steve Robman 14:17 3. Zafrullah Hancef 15:14
Two mile or cork track, Danvers, Mass. June 8—1. Baimo Ahti 15:10.5 2. Schell 15:12.6 3. Robman 15:31 4. ZimmaDave Hasenius 16:08
Cna Mile, MEAAU, Mandolph, Mass. June 14—Schell 7:30.2 2. Robman 7:31.4 3.
Hasenius 7:37.1 4. Hancef 7:39
10 Mile, Taunton, Mass. June 15—1. Schell 1:19:52 2. Robman 1:21:10
3. Ant hony Modeiros 1:26:10 4. Harenius 1:26:50

Northwest 50 Kile, Cak Harbor, Wash. April 10-1. Martin Rudow 5:05:28 2. George Edwards 5:17:35 3. Rich Rossan 5:32:43 4. Don Jacobs 5:57:57 5. John Noville 6:09:30
Northwest 20 Kile, Scattle, April 23 1. Martin Rudow 1:42:08 2. Rich Rossan 1:50:52
3. George Edwards 1:53:12 4. John Neville 2:01:59 Both races were held on the track. Karl Johanson, with knee trouble, failed to finish in both.

Eleckburn's Truism of the Mouth:

Never criticize a volunteer for not doing a good enough job. Anything he does at all, no matter how small, is on the plus side and should be recognised as such.

Publishers Notes: I am giving a new 1956 Cadillac to any subscriber that brings in 500 new subscriptions.

I feel that I must remind our readors that this is the Chio Race Walker, so we will blow our own horns louder than fair proportions dictate. In other words --- we think we are great!

Printer's Note: (Printer happens to be, would you believe —Mary Jo Hackburn)
She is giving away an old husbard (1935 model) for 50 cancellations.

The Mark Achem Lectter mentioned earlier:

Deer Sire: Excuse my tardiness. This cisck was due last month. My mother was bit

by a tortise when I was on the way.

Sorry to read the bitterness in Silcock's letter. He might have had something to say if he hadn't been so acrid. I agree that your editorial lacked a libble tact, but his sounded crass. Whatever your "philosophy", or his, I think the dirty laundrywear should have been aired elsewhere. I doubt that the dispute would do say more good for race walking than the McCarthy-Fields outrage. Otherwise I've enjoyed having you come into my home once a month.

The main concers of this though is the cartoonin May's issue. As a consequence by wife started buggin' me about my three hour training sessions and wantin' to how just why I can home so exhausted. Woll, now I've my own bed ward and timer. It generated a little imperest in her-she said something about solf-protection.